

From qrp-request@Think.COM Fri May 7 09:56:48 1993
Date: 07 May 1993 08:56:23 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: /USE QSO fun

Hi,

Well worked 2 /USE.. the band was the worst I have ever heard it.. but still managed to get through on 3 watts with the HW9... finally worked Clark in California on QRP..

Think if the bands improve that having a regularly scheduled time once a week on 30 and once on 40 may be a good thing.. anyone around there radio..can just tune in.

72

Jeff,AC4HF

From qrp-request@Think.COM Tue May 4 16:33:32 1993
Date: Tue, 4 May 93 10:33:26 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: 10 M ant.

Any comments concerning the use of a 5/8 wave vertical on 10M? Would the lower angle of radiation help or hinder?

Jeff NH6IL

From qrp-request@Think.COM Tue May 4 20:09:28 1993
Subject: Re: 10 M ant.
Date: Tue, 04 May 1993 16:50:54 -0700
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

Hello....Jeff writes regarding the use of a 5/8 wave vertical on 10 meters.

I had some real success with a converted CB 5/8 wave ground plane on 10 using 40 watts of AM back in the late '60's. (Yeah, just qualified for QCWA...feelin' a bit of an O.F.) I used several long wire antennas and a trap vertical (quarter wave) all in pretty close proximity. The 5/8 most always did better for the long haul stuff, but any short haul stuff was better with the quarter wave trap vertical, and, on occasion, my long wire was pointed just right and would pull them out. The CB antenna was real broad banded and sturdy. Got it for nearly nothing from an ex-CB'er (there is a source!)

Of course, your results may be different, but the 5/8 wave design is tried and true - and works a couple of db better for most folks. I suspect that the better the ground and the lower the horizon around you the better it will do at your particular installation.

72

Clark
WA3JPG

From qrp-request@Think.COM Fri May 7 19:19:12 1993
From: J. Sherwood Williams <jwill@cabell.vcu.edu>
Subject: 10 Meter Folded Dipole
Date: Fri, 7 May 93 19:19:08 EDT

Has anyone had any experience in building the Twinlead folded dipole antennas listed in the Antenna Handbook? I built the 10 Meter version to the measurements in the book (including the 39pf Silver mica capacitor) and can't seem to get the SWR down on the antenna. there is a slight dip at the resonant frequency, but it still isn't below 3:1 I even made a coax coke balun and that didn't help either. Any suggestions? I've rechecked all my measurements and all my solder joints and just wonder what I might try next to get the SWR down to an acceptably low QRP SWR (1.2:1 or lower)

Robert S. Williams

From qrp-request@Think.COM Fri May 7 23:07:44 1993
Date: Fri, 7 May 93 11:29:40 EDT
From: Frank.Milos@East.Sun.COM (Frank Milos - Sun USOPS CSU Manufacturing Engineering)
Subject: 10.120

Listened for about 10 minutes and heard 1 ragchew between
From qrp-request@Think.COM Thu May 6 15:29:35 1993
Date: Thu, 06 May 93 19:19:52 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: 10.120 @ 0100 UTC TONITE!!!!

See y'all there!
72, Jim, KR1S

From qrp-request@Think.COM Fri May 7 09:29:04 1993
Date: Fri, 7 May 1993 8:28:50 -0500 (CDT)

From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>
Subject: 10.120 @ 0100 UTC TONITE!!!!

>See y'all there! 72, Jim, KR1S

I was there, but heard no 1's. Worked a D.C. 4 and an L.A. 6.

Cheers & 72!

Jim K5YUT

From qrp-request@Think.COM Tue May 4 15:33:23 1993
Date: Tue, 04 May 1993 12:33:23
From: hlester@as.arizona.edu (Howard Lester)
Subject: 10m antennas

>From: J. Sherwood Williams <jwill@cabell.vcu.edu>

>I am also looking for a good antenna design for the 10 Meter band. I
>tried building one of those twinlead dipoles described in the Antenna
>Handbook; but the SWR is really high and I can't seem to figure out

Why not a simple 52-ohm coax fed dipole, horizontal or vertical? Or, if
you'd like to spend some money, how about a Cushcraft AR-10 Ringo (approx.
\$50)? I worked a fellow in PA using one mounted on his roof, and he said he
loved it.

Howard

From qrp-request@Think.COM Tue May 4 16:53:57 1993
Date: Tue, 4 May 93 13:51:53 PDT
From: Dennis.Henderson@Eng.Sun.COM (Dennis Henderson)
Subject: Re: 10m antennas

> From qrp-request@Think.COM Tue May 4 13:17:25 1993
> Date: Tue, 04 May 1993 12:33:23
> From: hlester@as.arizona.edu (Howard Lester)
> To: QRP@Think.COM
> Subject: 10m antennas
> In-Reply-To: <9305041654.AA09255@cabell.vcu.edu>
>

> >From: J. Sherwood Williams <jwill@cabell.vcu.edu>

>

> >I am also looking for a good antenna design for the 10 Meter band. I
> >tried building one of those twinlead dipoles described in the Antenna
> >Handbook; but the SWR is really high and I can't seem to figure out

I found a simple dipole fed by 50ohm coax did not load well. I
dropped the ends down and created an inverted V which loaded. I
ended up with almost a 45 degree droop before a decent match was
established.

...Dennis Henderson, N6TTW, ts520@5 watts, B'nut vert, 40m CW, QRP=TVI fix

ps: how about we add a "by line with brief description of QRP setup??

From qrp-request@Think.COM Tue May 4 17:21:24 1993

Date: Tue, 04 May 1993 14:21:28

From: hlester@as.arizona.edu (Howard Lester)

Subject: Re: 10m antennas

>From: Dennis.Henderson@Eng.Sun.COM (Dennis Henderson)

>I found a simple dipole fed by 50ohm coax did not load well. I
>dropped the ends down and created an inverted V which loaded. I
>ended up with almost a 45 degree droop before a decent match was
>established.

That's weird. A "pure" horizontal dipole is around 70 ohms and should load
fine with 50 ohm coax, IF the dipole antenna itself is indeed resonant at
the frequency in mind. I suspect maybe it was not and required some pruning.
Going by the formula "468/freq. in MHz" may not apply in your case if there
are too many surrounding objects and, perhaps, the antenna is too low to the
ground. In any case, drooping the wires to 45 degrees does indeed reduce the
feed impedance to 50 ohms.

By the way, what WAS the SWR when the antenna was horizontal?

Howard

From qrp-request@Think.COM Wed May 5 11:49:00 1993

From: mont@netcom.com (Mont Pierce)

Subject: Re: 10m antennas

Date: Wed, 5 May 93 8:49:15 PDT

>

> >From: Dennis.Henderson@Eng.Sun.COM (Dennis Henderson)

>

> >I found a simple dipole fed by 50ohm coax did not load well. I
> >dropped the ends down and created an inverted V which loaded. I
> >ended up with almost a 45 degree droop before a decent match was
> >established.
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> That's weird. A "pure" horizontal dipole is around 70 ohms and should load
> fine with 50 ohm coax, IF the dipole antenna itself is indeed resonant at
> the frequency in mind. I suspect maybe it was not and required some pruning.
> Going by the formula "468/freq. in MHz" may not apply in your case if there
> are too many surrounding objects and, perhaps, the antenna is too low to the
> ground. In any case, drooping the wires to 45 degrees does indeed reduce the
> feed impedance to 50 ohms.
>

I've always used 75 ohm coax for dipoles, but I've been away from Ham radio
for several years. Is there a some reason why the 50/70 ohm mismatch is
better to have at the antenna end instead of the transmitter end?

75 ohm coax also has less antenuation then 50 ohm cable, allowing you to
run about a 1/3 longer cable before reaching the same power loss.

Anyways, just curious...

73,

--

Mont Pierce

```
+-----+
| Ham Call: KM6WT           Internet:  mont@netcom.com       |
|   bands: 80/40/20/15/10/2  IBM vnet:  mont@vnet.ibm.com    |
|   modes: cw,ssb,fm        |                               |
+-----+
```

P.S. What exactly does "72" mean? Does anyone have a list of all the
codes and what they mean? I only know for sure 73 & 88.... :-)

From qrp-request@Think.COM Wed May 5 12:46:51 1993
Date: Wed, 5 May 93 09:46:14 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: 10m antennas

```
+From qrp-request@Think.COM Wed May 5 09:44:18 1993
+Received: from soldev.tti.com by harley.tti.com (4.1/SMI-4.1)
+ id AA12188; Wed, 5 May 93 09:44:17 PDT
+Received: from mail.think.com by soldev.tti.com (4.1/SMI-4.1)
+ id AA23946; Wed, 5 May 93 09:44:12 PDT
+Received: by mail.think.com; Wed, 5 May 93 11:49:06 -0400
```

+Return-Path: <mont@netcom.com>
+Received: from Think.COM by mail.think.com; Wed, 5 May 93 11:49:00 -0400
+Received: from netcom4.netcom.com by Early-Bird.Think.COM; Wed, 5 May 93 11:48:57 EDT
+Received: by netcom4.netcom.com (5.65/SMI-4.1/Netcom)
+ id AA23912; Wed, 5 May 93 08:49:15 -0700
+From: mont@netcom.com (Mont Pierce)
+Message-Id: <9305051549.AA23912@netcom4.netcom.com>
+Subject: Re: 10m antennas
+To: qrp@Think.COM
+Date: Wed, 5 May 93 8:49:15 PDT
+In-Reply-To: <QBE6DE59@mmmpc6>; from "Howard Lester" at May 4, 93 2:21 pm
+X-Mailer: ELM [version 2.3 PL11]
+Status: R
+
+>
+> >From: Dennis.Henderson@Eng.Sun.COM (Dennis Henderson)
+>
+> >I found a simple dipole fed by 50ohm coax did not load well. I
+> >dropped the ends down and created an inverted V which loaded. I
+> >ended up with almost a 45 degree droop before a decent match was
+> >established.
+>
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+> fine with 50 ohm coax, IF the dipole antenna itself is indeed resonant at
+> the frequency in mind. I suspect maybe it was not and required some pruning.
+> Going by the formula "468/freq. in MHz" may not apply in your case if there
+> are too many surrounding objects and, perhaps, the antenna is too low to the
+> ground. In any case, drooping the wires to 45 degrees does indeed reduce the
+> feed impedance to 50 ohms.
+>
+
+I've always used 75 ohm coax for dipoles, but I've been away from Ham radio
+for several years. Is there a some reason why the 50/70 ohm mismatch is
+better to have at the antenna end instead of the transmitter end?
+
+75 ohm coax also has less antenuation then 50 ohm cable, allowing you to
+run about a 1/3 longer cable before reaching the same power loss.
+
+Anyways, just curious...
+
+73,+P.S. What exactly does "72" mean? Does anyone have a list of all the
+ codes and what they mean? I only know for sure 73 & 88.... :-)

Don't tell me that you never heard of 55?

From qrp-request@Think.COM Wed May 5 13:01:37 1993
Date: Wed, 05 May 1993 10:01:32

From: hlester@as.arizona.edu (Howard Lester)
Subject: Re: 10m antennas

>I've always used 75 ohm coax for dipoles, but I've been away from Ham radio
>for several years. Is there a some reason why the 50/70 ohm mismatch is
>better to have at the antenna end instead of the transmitter end?

>75 ohm coax also has less antenuation then 50 ohm cable, allowing you to
>run about a 1/3 longer cable before reaching the same power loss.

>Mont Pierce

I don't agree that 75 ohm coax has less attenuation than 50 - it depends on the makeup and diameter of the cable itself. Perhaps you mean "all things being equal, 75 is lower loss than 50".

The lower the inherent loss of the cable, the less important to have a perfect match at the antenna. (Thus the use of LADDER LINE or TWINLEAD for a single dipole that operates all bands via a transmatch.) For a simple dipole, a transmatch at the transmitter can easily tune out the 20 ohm (or whatever you call it) difference. But, it's probably a better idea to NOT use one in this case - I sure wouldn't.

I once operated a 20 meter horizontal dipole with 50' of RG58 and worked the world with my Heath HW-32. SWR was minimal. Moral: don't worry about it. Well, not too much....Of course, at QRP levels one does have to lose a LITTLE sleep over this.

:) Howard

From qrp-request@Think.COM Wed May 5 13:39:58 1993
From: bwhite@dtd.camb.inmet.com (Bill White)
Subject: Re: 10m antennas
Date: Wed, 5 May 1993 13:36:44 -0400 (EDT)

> +73,+P.S. What exactly does "72" mean? Does anyone have a list of all the
> + codes and what they mean? I only know for sure 73 & 88.... :-)
>
> Don't tell me that you never heard of 55?

Can you say 55 on the internet if you're not Howard Stern?

Peace,
Bill White, N10SA
Just a lurker

From qrp-request@Think.COM Wed May 5 16:02:06 1993

From: bwhite@dsd.camb.inmet.com (Bill White)
Subject: Re: 10m antennas
Date: Wed, 5 May 1993 13:36:44 -0400 (EDT)

> +73,+P.S. What exactly does "72" mean? Does anyone have a list of all the
> + codes and what they mean? I only know for sure 73 & 88.... :-)
>
> Don't tell me that you never heard of 55?

Can you say 55 on the internet if you're not Howard Stern?

Peace,
Bill White, N10SA
Just a lurker

From qrp-request@Think.COM Fri May 7 19:29:31 1993
Date: Fri, 7 May 93 16:28:36 PDT
From: Dennis.Henderson@Eng.Sun.COM (Dennis Henderson)
Subject: Re: 10m antennas

>
> That's weird. A "pure" horizontal dipole is around 70 ohms and should load
> fine with 50 ohm coax, IF the dipole antenna itself is indeed resonant at
> the frequency in mind. I suspect maybe it was not and required some pruning.

I pruned and extended and could not get a good load.

> Going by the formula "468/freq. in MHz" may not apply in your case if there
> are too many surrounding objects and, perhaps, the antenna is too low to the
> ground.

Bingo ^ 2. The antenna was very close to the ground. It was about 10 feet
off the ground. The final resting place was in the attic which was in
close proximity to many objects.

>In any case, drooping the wires to 45 degrees does indeed reduce the
> feed impedance to 50 ohms.

Simple, immediate fix.

>
> By the way, what WAS the SWR when the antenna was horizontal?
>

Would not load...3+.

...Dennis Henderson, N6TTW

From qrp-request@Think.COM Thu May 6 05:54:55 1993
Date: Thu, 6 May 1993 4:53:09 -0500 (CDT)
From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>
Subject: 20 or 30?

>If I were to buy a real QRP rig, for one band, should I get one for 30 or
>for 20? (I recently worked a fellow in KY with his new 20m MFJ and he
>convinced me to get a 20, but I can't remember why! Must not have made that
>great an impression on me....)

>
>I'd think 30 is better because it's open - at least to SOMEwhere, almost all
>the time. 20 can be fun, but it sometimes closes for repairs or for
>inventory.

>
>KE7QJ

That's one of the reasons I chose 30. Another is that compared with 40, which
can also be fun, antennas are relatively compact and easy to make. Yet another
is the power limit: my 4 watts is less than 20 db below the limit. (Not a
practical factor if you're running 10 mw, I'll admit.)

On the negative side, however, if you're a wall paper collector don't forget
that neither the big contests nor DXCC include 30.

Cheers & 72!

Jim K5YUT

From qrp-request@Think.COM Thu May 6 10:42:17 1993
Date: Thu, 6 May 93 09:41:59 CDT
From: sfarmer@amoco.com (Steven L. Farmer)
Subject: Re: 20 or 30?

>On the negative side, however, if you're a wall paper collector don't forget
>that neither the big contests nor DXCC include 30.

As I recall, qsos on *any* of the hf bands, including 30, count for basic
dxcc. There's no 5bdxcc endorsement for the band like there is for 12 and
17 though. As this cycle continues to decline, I expect the band to be
more and more important for dxing. Even now, the pileups can at times
rival anything you'll hear on 40 or 20.

Steve WA5RPF

From qrp-request@Think.COM Thu May 6 12:03:07 1993
Date: Thu, 06 May 1993 09:02:53
From: hlester@as.arizona.edu (Howard Lester)
Subject: Re: 20 or 30?

>On the negative side, however, if you're a wall paper collector don't forget
>that neither the big contests nor DXCC include 30.

>Jim K5YUT

A week or so ago I worked a 3B8 on 30, admittedly with full 100
watts....Anyway, that's halfway around the world. I'd say DX is out there,
"even on 30!"

By the way, I've heard of 3 ways of getting the power down to 5 watts on my
IC-735: One is an internal switch that changes the power range from 10-100W
to 5-50W; another is constructing something to insert into the ALC jack in
the back of the rig; and a third is adjusting some internal control. The
first option is out of the question; the second is, well, I don't like
messing with stuff like that; and the third is, well, I don't like messing
with the internals. Any other ideas?

Howard KE7QJ

From qrp-request@Think.COM Thu May 6 12:16:29 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Thu, 6 May 93 09:15:16 PDT
Subject: Re: 20 or 30?

A weird aside: 5bdxcc now means any 5 bands: 6m and 2m dxcc now count
towards 5bdxcc. But I doubt QRP 2m DXCC will fall for a while (though
with satellites I might be eating my words soon ...)

Once again the ARRL strains itself to contain progress :-)

72

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears
to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From: Steven L. Farmer <netmail!sfarmer@amoco.com>
To: <qrp@Think.COM>
Subject: Re: 20 or 30?

Date: Thursday, May 06, 1993 9:41AM

>On the negative side, however, if you're a wall paper collector don't forget
>that neither the big contests nor DXCC include 30.

As I recall, qsos on *any* of the hf bands, including 30, count for basic dxcc. There's no 5bdxcc endorsement for the band like there is for 12 and 17 though. As this cycle continues to decline, I expect the band to be more and more important for dxing. Even now, the pileups can at times rival anything you'll hear on 40 or 20.

Steve WA5RPF

From qrp-request@Think.COM Thu May 6 12:47:22 1993
Date: Thu, 6 May 93 12:47:08 EST
From: JENNINGS%UPAC01.VMS@UBSV01.abb.com
Subject: Re: 20 or 30?

>
> X-sent: from UBSV01.ABB.COM via MAIL-11 (13Apr93-1037); Thu,
> 6 May 93 12:19:37 EST
> Received: from nms1.abb.com by UBSV01.ABB.COM via Pony Express SMTP
> with TCP (v8.1.1-dmr001); Thu, 6 May 93 12:19:18 EST
> Received: from mail.think.com by nms1.abb.com (4.1/ABB-05MAY93) id
> AA29729; Thu, 6 May 93 12:19:14 EDT
> Received: by mail.think.com; Thu, 6 May 93 12:03:11 -0400
> Return-Path: <hlester@as.arizona.edu>
> Received: from Think.COM by mail.think.com; Thu,
> 6 May 93 12:03:07 -0400
> Received: from as.arizona.edu (astro.as.arizona.edu) by
> Early-Bird.Think.COM; Thu, 6 May 93 12:03:05 EDT
> Received: from nelson.as.arizona.edu (nelson-gw.as.arizona.edu) by
> as.arizona.edu (4.1/1.2) id AA02853; Thu, 6 May 93 09:02:58 MST
> Received: from mmpc6.as.arizona.edu by nelson.as.arizona.edu (4.1/1.2)
> id AA11693; Thu, 6 May 93 09:03:00 MST
> Date: Thu, 06 May 1993 09:02:53
> From: hlester@as.arizona.edu (Howard Lester)
> To: QRP@Think.COM
> Subject: Re: 20 or 30?
> Message-Id: <QBE936AE@mmpc6>
> In-Reply-To: <930506045309.2020e16e@CCSVAX.SFASU.EDU>
>
> >On the negative side, however, if you're a wall paper collector don't forget
> >that neither the big contests nor DXCC include 30.
>
> >Jim K5YUT

>
>
> A week or so ago I worked a 3B8 on 30, admittedly with full 100
> watts....Anyway, that's halfway around the world. I'd say DX is out there,
> "even on 30!"
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> IC-735: One is an internal switch that changes the power range from 10-100W
> to 5-50W; another is constructing something to insert into the ALC jack in
> the back of the rig; and a third is adjusting some internal control. The
> first option is out of the question; the second is, well, I don't like
> messing with stuff like that; and the third is, well, I don't like messing
> with the internals. Any other ideas?
>
> Howard KE7QJ
>
>

Howard,

Why not build an in-line attenuator which would drop the power to the
antenna?

Tom, KV2X

--

```
-----  
Thomas J. Jennings      | Tel: (716) 273 7071  
Development Engineer    | Fax: (716) 273 7262  
                        | Internet: jennings@abb.com  
ABB Process Automation  |  
Post Office Box 22685   |  
Rochester, New York 14692-2685 |  
-----
```

From qrp-request@Think.COM Fri May 7 08:44:48 1993
Date: Thu, 6 May 93 08:08:32 PDT
From: ed@imp.pnl.gov
Subject: RE: 20 or 30?

... stuff deleted...

> On the negative side, however, if you're a wall paper collector don't forget
> that neither the big contests nor DXCC include 30.
>

> Cheers & 72!
>
> Jim K5YUT
>
>

I'm confused a little by 30 meters situation relative to awards. I thought that 30m contacts were ok for the basic awards (WAS DXCC), just not the 5-band ones. Anyone out there really know what the story is???

72/Ed N7YQR

From qrp-request@Think.COM Fri May 7 08:36:51 1993
Subject: 30 meter USEnet gathering
Date: Thu, 06 May 1993 22:21:31 -0700
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

Well, Bruce was accurate, 30 was noisy....very noisy. Here on the West Coast I could just pull Bruce, WT1M and Jeff, AC4HF out of the mud. I was running a full QRP gallon of 5 watts, while the others ran a bit less than I did. It was fun to readjust my manual key again....it is getting a little better each time.

Clark
WA3JPG

From qrp-request@Think.COM Tue May 4 15:14:20 1993
Date: Tue, 4 May 93 14:14:03 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: 40 meters

Gang,

1. lets not make ourselves public. we'll get more fluff and i don't mind the volume of mail as it stands now. of course, i am not putting money into the mail part, but i am dialing in long distance, so it does cost me. i live out in the country - how else do you think i can put up a 80 meter long wire up 10 meters!!
2. we have some famous people in this group. i leave it as an exercise to find out who. i'm not one of them. ;-)
3. i was on last night at 0300 UTC between 7040 and 7050. band wasn't too great. one iowa, one arizona, and one texas wid 2 watts, OHR Spirit. i was doing 20 to 25 wpm and i WILL QRS. ;-)

4. 40 meters here today (tuesday) is deader than a door knob this afternoon. not even any digital garbage from 7060 to 7100 and if you don't hear that, you know the absorption is high.

72 de k5fo

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Mon May 3 16:17:12 1993
Date: Mon, 3 May 93 12:30:58 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: 40Mtrs tonight

look for K5FO on 7040-7050 KHz from 1500 to 1600 UCT. hoping that we aren't having any significant electrical activity in the area.

do you know what an 80 meter long wire does during a thunderstorm? the MFJ 941C tuner just doesn't take kindly to it. but i'd rather lose a tuner than lose a rig..... ;-)

i'll be there come hail or high water. +/- QRM

how low can you go?

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Thu May 6 13:07:48 1993
Date: Thu, 6 May 93 13:05:44 EDT
From: Jim Reisert AD1C <reisert@mast.enet.dec.com>
Subject: 5BDXCC

Kevin, N7WIM wrote:

>A weird aside: 5bdxcc now means any 5 bands: 6m and 2m dxcc now count
>towards 5bdxcc. But I doubt QRP 2m DXCC will fall for a while (though
>with satellites I might be eating my words soon ...)

I do not believe this is true. You must still obtain DXCC on 10/15/20/40/80

to qualify for the 5BDXCC award. *HOWEVER* you can get endorsements for 160/17/12/6/2.

73 - Jim AD1C

--

James J. Reisert Internet: reisert@mast.enet.dec.com
Digital Equipment Corp. UUCP: ...decwrl!mast.enet.dec.com!reisert
146 Main Street - ML03-6/C9 Voice: 508-493-5747
Maynard, MA 01754 FAX: 508-493-0395

From qrp-request@Think.COM Fri May 7 14:26:48 1993
Date: Fri, 7 May 1993 14:27:46 -0400
From: reisert@mast.enet.dec.com (Jim Reisert AD1C)
Subject: 5BDXCC rules clarification (from ARRL DXCC desk)

-----Forwarded item dated 7-MAY-1993 14:27:28.66-----

From: US1RMC::"tzimmer@arrl.org"
To: mast::reisert
Subj: Re: 5BDXCC rules clarification

To: AD1C

Subject: 5 Band Rules

1. All QSOs after November 1945 count, except deleted countries.
2. Per Section I. 1.) (1), 80/40/20/15/10 for basic award.
You may endorse for all other bands except 30 meters.
This includes UHF, microwaves, etc.

73,

Bill K5FUV

--

James J. Reisert Internet: reisert@mast.enet.dec.com
Digital Equipment Corp. UUCP: ...decwrl!mast.enet.dec.com!reisert
146 Main Street - ML03-6/C9 Voice: 508-493-5747
Maynard, MA 01754 FAX: 508-493-0395

From qrp-request@Think.COM Tue May 4 16:18:52 1993
Date: Tue, 4 May 93 10:18:40 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: 70+ wpm cw

Chuck (K5FO),

70+ wpm? Is that with a straight key? sidwinder? bug? keyer? keyboard?
(note the ascending order of instrument capability.... ;*)

Jeff NH6IL

From qrp-request@Think.COM Tue May 4 18:12:45 1993

Date: Tue, 4 May 93 17:12:36 -0500

From: adams@chuck.dallas.sgi.com (Charles Adams)

Subject: 70+wpm

well gang, i can type 88 wpm and i do use a keyboard at high speed.
ain't no way i know of going faster than 45 or 50 wpm on paddle.
at least go that fast have anyone else copy it.

20 wpm straight key

25 wpm bug

35 wpm paddle es iambic keyer

88 wpm keyboard, but nobody can copy it without computer ;-)

1. 40 back to signals. again 0300Z 7040 to 7045 +/- qrm.

2. 10.105-10.108 30 meters before that if i can make it

3. 14.060 other times when 20 is open.

call CQ USE and stand back for the pileups.

cul es gl ga bcnu 72 de k5fo

p.s. got to 70+ wpm in 30 years of operating only cw.

memorized code one night, next day was doing 12 wpm.

20 wpm in two weeks and 30 wpm in month. filled up

10 ARRL logbooks in 1960-1961 school year on 40 cw

running heath apache es national nc-300 rcvr. 25 watt level.

pair of 1n34 diodes across rcvr terminal and 15 watt 120 volt

bulb in series for qsk. rig weighed over 150 pounds. now

rig weighs 15 oz. let's not go back guys/girls. ;-)

Chuck Adams, K5FO @ 70+ wpm cw

adams@sgi.com

From qrp-request@Think.COM Fri May 7 13:09:03 1993
Date: Fri, 07 May 1993 11:08:06 EDT
From: "Fred Cady iieefc@msu.oscs.montana.edu" <fred_c@ece.ee.montana.edu>
Subject: 72

So OK guys, I give up. What DOES 72 mean?

From qrp-request@Think.COM Fri May 7 08:37:15 1993
Date: Fri, 7 May 93 00:52:33 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: aa2u

ok, he did it and i'll follow up. randy, aa2u, gave you guys some hints on working SSB QRP and he is THE master. here, and i quote from page 28, Oct '92 QQ.

QRP ARCI Awards summary - second quarter 1992 July 4, 1992

CALL	DATE	BASIC	NOTES	MODE	BAND
----	-----	-----	-----	-----	-----
AA2U	5/25/92	112C	Single Band DXCC	CW	10.1 (that's good, no ssb)
AA2U	5/25/92	113C	Single Band DXCC	MIX	18.1
AA2U	5/25/92	114C	Single Band DXCC	MIX	24.9
AA2U	5/25/92	78C	250 Seal Single B.	MIX	14
AA2U	5/25/92	79C	260 Seal Single B.	MIX	21
AA2U	5/25/92	80C	230 Seal Single B.	MIX	28

see, i told you we had some famous people on the qrp nets.....

i'm honored and congratulations to Randy. i'll just call him Dr. DX. ;-)

i didn't know that there were that many countries. here in texas, everybody is a country.

he was being quite, so Randy, we'll promise not to bug you too much.

somebody sent me email saying that they didn't wanna make a fool of themselves in front of somebody famous. hell gang, look what i just did. ;-) no pain, no gain.....

200+ countries QRP in the visible spectrum (anything above 10.2 MHz

to me) is impressive. i know that there are some guys/girls around running 2 KW that aren't even close.

ok, Randy, i'll crawl back into my hole. inquiring minds wanted to know. let us know when you hit 300 and i'll buy dinner.

72 de k5fo dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Fri May 7 15:35:39 1993
Date: Fri, 7 May 93 12:35:30 PDT
From: ___Why?___ 07-May-1993 1338 <brewer@ace.enet.dec.com>
Subject: add please, to qrp mailing list?

My address is: brewer@anarky:enet.dec.com

From qrp-request@Think.COM Tue Apr 27 19:41:48 1993
Subject: Address of KANGA, US
Date: 27 Apr 93 23:35:15 GMT (Tue)
From: danbl@arcturis.cna.tek.com

Could someone please post the address of KANGA, US ?

thank you,
Daniel Blakley KB6MHN

From qrp-request@Think.COM Sun May 2 11:13:54 1993
Date: Sun, 2 May 93 11:15:17 -0400
From: swart@curry.lmo.dec.com (Mark Swartwout, NX1K)
Subject: Addresses for QRP ARCI Quarterly

For those who have asked about the QRP-ARCI and QRP Quarterly:

QRP Amateur Radio Club, International (QRP-ARCI) was founded in 1961 and publishes a quarterly newsletter, QRP-Quarterly, that new runs about 40 pages.

New Members in the USA send \$12, Check or Money Order payable to QRP-ARCI.

Mike Kilgore, KG5F
2046 Ash Hill Road

Carrollton, Texas 75007

US renewals are \$10.

New members outside US send 7 pounds, Check or money order payable to G-QRP or to R. Pascoe G0BPS.

Dick Pascoe, G0BPS
Seaview House
Crete Road East
Folkestone, Kent CT18 7EG
England

DX renewals are 6 pounds.

Hope this helps.

72 de Mark, NX1K

From qrp-request@Think.COM Mon May 3 12:54:55 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Mon, 3 May 93 09:33:33 PDT
Subject: RE: Addresses for QRP ARCI Quarterly

Note that the inverse is also true:

You can join the G-QRP club by sending the money to the ARP ARCI treasurer and asking to join G-QRP club. The exact figures escape me at the moment ...

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com
"We conjure the spirits of the computer with our spells"

From: Mark Swartwout NX1K <netmail!swart@curry.lmo.dec.com>
To: <qrp@Think.COM>
Subject: Addresses for QRP ARCI Quarterly
Date: Sunday, May 02, 1993 11:15AM

For those who have asked about the QRP-ARCI and QRP Quarterly:

QRP Amateur Radio Club, International (QRP-ARCI) was founded in 1961 and publishes a quarterly newsletter, QRP-Quarterly, that now runs about 40 pages.

New Members in the USA send \$12, Check or Money Order payable to QRP-ARCI.

Mike Kilgore, KG5F
2046 Ash Hill Road
Carrollton, Texas 75007

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to G-QRP or to R. Pascoe G0BPS.

Dick Pascoe, G0BPS
Seaview House
Crete Road East
Folkestone, Kent CT18 7EG
England

DX renewals are 6 pounds.

Hope this helps.

72 de Mark, NX1K

From bruce@Think.COM Tue May 4 09:40:02 1993
From: Bruce Walker <bruce@Think.COM>
Date: Tue, 4 May 93 09:40:01 EDT
Subject: administrivia

As I've stated before, I have no intention of making the QRP list into a
newsgroup anytime soon, for many of the reasons cited by others. The list
is a manageable size (about 130 recipients right now in 12 DXCC countries).
We lose a few people every so often because of heavy volume, but I've been
pleased with the amount of information and discussion on the list so far,
and it's inevitable that the volume of a successful list will drive some
people away. But let's not spend our bandwidth discussing list vs
newsgroup, let's spend it talking QRP.

The current list of things in the anonymous FTP area (on Think.COM, in
directory pub/radio/ham/qrp):

1675 Apr 15 12:44 clubs	List of club membership info
14527 May 3 16:33 directory	Directory of list member interests
36009 May 3 18:16 qq-index	QRP Quarterly index (recently posted)
81446 May 3 11:47 qrp-archives.current	Mail archive
2607 Apr 13 15:53 qrp-ne.info	Membership form for QRP New England Club

Jim Kearman, KR1S, has volunteered to maintain a list of Frequently Asked
Questions for the group. Suggestions for that should go to him
(jkearman@arrl.org).

I, for one, completely forgot about the Sunday morning QSO party. Sigh.

--bruce WT1M

From qrp-request@Think.COM Fri Apr 30 01:48:01 1993
Date: Thu, 29 Apr 93 22:46:48 PDT
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: Back Issue Reprints of QRP Quarterly

I have available reprints of the Journal of the Amateur Radio Club International the QRP Quarterly, from 1985 through 1992. They are bound in 1 year editions, and have a heavy card stock cover. The cost of each year is \$10, and you will need to add \$3 per order postage, i.e. if your order is for 2 years, send \$23.00, if 5 years are ordered, send \$53.00. There is also a special price of \$73.00 for the full set of 8 years, postpaid. Please do not ask me to break up year sets for 1 issue, as I have to do a print run of 7000 copies to get a price that allows me to sell at these prices.

These journals are full of great QRP info. Send your orders to:

Doug Hendricks, KI6DS
862 Frank Ave.
Dos Palos, CA 93620

72, and have a great day.
Doug, KI6DS

From qrp-request@Think.COM Tue May 4 15:15:19 1993
Date: Tue, 4 May 93 9:14:35 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: batteries

Keep in mind that a cheap rechargeable battery for QRP operation is a 12V motorcycle battery (wet cell). They are small in size (4.5 X 5 X 2.25), have a capacity of about 4AH, and a charger can easily be thrown together.

Jeff NH6IL

Jeffrey Herman, University of Hawaii Mathematics, jherman@hawaii.edu

From qrp-request@Think.COM Tue May 4 17:37:25 1993
Date: Tue, 4 May 93 14:37:18 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: batteries

+Keep in mind that a cheap rechargable battery for QRP operation is a 12V
+motorcycle battery (wet cell). Their small in size (4.5 X 5 X 2.25),
+have a capacity of about 4AH, and a charger can easily be thrown
+together.

I've found that the perfect holder for a motorcycle battery is a
motorcycle! And it comes with a built-in charging circuit!

From qrp-request@Think.COM Fri Apr 30 17:41:11 1993
Date: Fri, 30 Apr 93 16:54:25 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: Campbell KK7B R1 DC receiver

Yes, I have built one. Also made many modifications to improve it. Its one of
the better DC receivers I've built. Does have excellent DR, low noise and
its the only DC receiver I've heard that actually has the tonal quality that
everyone talks about. The filtering is really nice. A summary of the chages
are:

1. Elimated L2 and R2 from the diplexer to improve AM suppression (I live near
an AM broadcaster). Also lowered all the high pass filter corner frequencies
because I like to copy a lower beat note than 750Hz. As shown, there all
above 300Hz, which is fine for SSB.
2. Rebiased the 50 ohm audio preamp for proper operation with a 13.5V supply.
Also used a ultra low noise transistor at Q1.
3. Improved the 7th order eliptical filter. Author scaled values from another
authors SSB design. Tightened up the filter quite a bit. See attached.
4. Improved the biasing and changed the gain distribution a bit on both U2A
and U2B.
5. The power amp had a Icq of 100ma and gets quite hot. Don't need to generate
this kind of heat and use this much power. Rebiased the power amp to idle
much lower (10 -20 ma). Fidelity is still excellent.

73's Ed W1AAZ

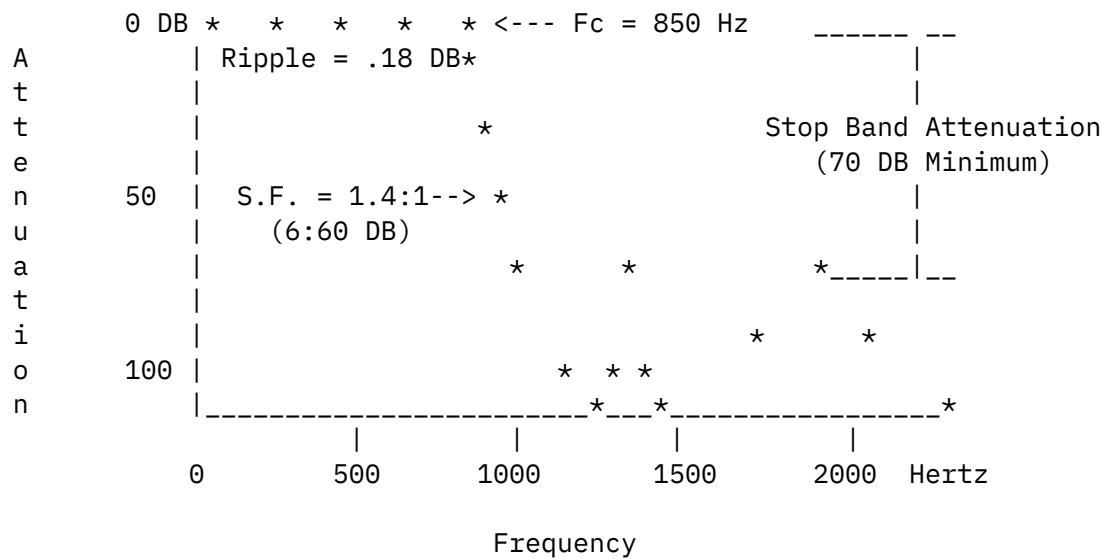
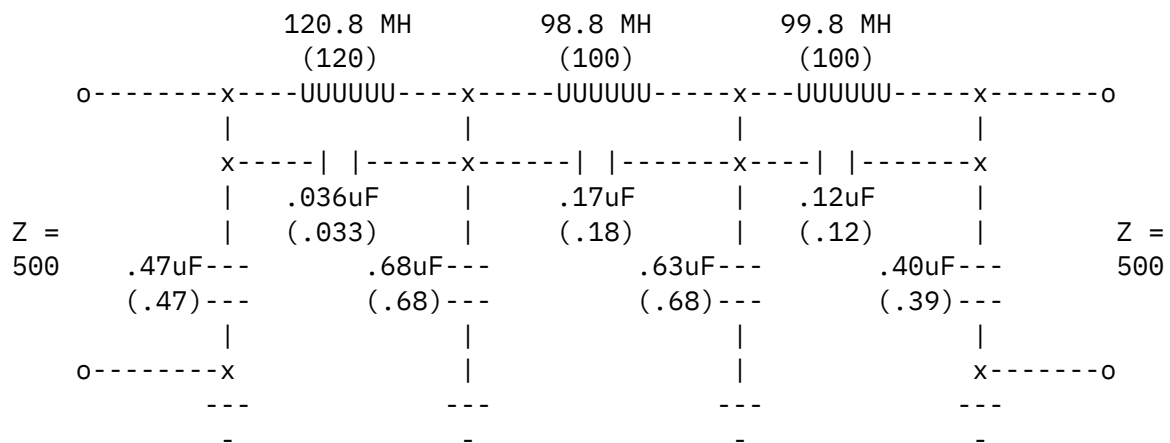


Figure 1. Frequency Response (7th order E.L.P.F)



Note: Values shown are calculated. () are the nearest standard value.

Figure 2 Schematic - Elliptical Low Pass Filter (7th order)

From qrp-request@Think.COM Fri Apr 30 18:28:43 1993
From: Stan Witherspoon <stan@hprstw.rose.hp.com>
Subject: Re: Campbell KK7B R1 DC receiver
Date: Fri, 30 Apr 93 15:28:37 PDT"

Edward,
You mentioned that you replaced Q1 with a very low noise transistor. Did you notice any change in noise level with the change? In Rick's article, he mentions that he found the noise to be ~5db worse than he expected because of 1/f noise generated in the mixer diodes in the SBL-1. Is that the major noise source? also, what transistor did you use?

stan N6SCE

--

```
~~~~~  
~      Stan Witherspoon   (916) 785-5071      ~  
~      Systems Technology Division              ~  
~      8020 Foothills Blvd.                    ~  
~      Roseville, CA 95678                     ~  
~      HPDesk: Stan (hprpcd) /HP5200/UX        ~  
~      Unix to Unix: stan@hprpcd.rose.hp.com    ~  
~~~~~
```

From qrp-request@Think.COM Wed May 5 02:00:06 1993
From: J. Sherwood Williams <jwill@cabell.vcu.edu>
Subject: Cheap Source for 10M Mizuho Rig
Date: Wed, 5 May 93 2:00:00 EDT

Wow! I have never had so much response from ONE message in my life!

Thanks for making me feel so welcome on the QRP mailing list. Here are the specifics for ordering the A.E.A. versions (made by Mizuho in Japan) MX-28S from the outfit that bought the entire line from AEA when AEA stopped selling them. J-Com is the current USA distributor for the Mizuho line.

Only the 10 Meter version is on sale. You can order from the USA via telephone using a credit card and have the unit the next day via UPS Red Label from Canada.

Atlantic Ham Radio LTD.
368 Wilson Ave.
Downsview, Ontario
Canada M3H 1S9
(416) 636-3636

The total cost: including the credit card currency conversion fee and the UPS next-day Air delivery is \$200.00 CDN or \$165.00 US

The UPS Customs clearinghouse will send you a bill for about \$7.00 to pay the US Customs on the purchase.

Now, next I will attempt to upload a file with the specifications for the Mizuho line.... wish me luck!

Robert S. Williams

From qrp-request@Think.COM Wed May 5 14:32:41 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Wed, 5 May 93 11:28:38 PDT
Subject: RE: Cheap Source for 10M Mizuho Rig

The saga starts:

I decided I wanted one of these rigs so I just gave them a call and came away with the following points:

0. If you ask for a Mizuho MX-28S you get nowhere. If you ask for the 10m HandyTalkie then they know what you are talking a-boot.
1. The good news: the rig is only \$159 CDN if you pay by money order, cheque or cash, \$165 CDN by credit card.
2. The bad news: The only shipping mode they use to the USA is UPS next day air for \$38 (gasp! You can build a rig for that!)
3. The worst news: I got a shop person who consulted with their manager and he wouldn't take my order over the phone. They have had problems with credit card fraud and bad addresses. He told me to call and talk to their owner (Mr Lutz) tomorrow about a credit card order. I presume they don't have online credit card validation in Ontario yet, eh?
4. They will ship to the US on a money order (no GST) for the right amount in shipping.

So I haven't ordered one yet :-(Anyone else succeeded yet. Perhaps they are wondering why they have a lot of weird American calls for this rig in the past day?

With the big shipping fee I'm thinking of consolidating a couple of orders. Any one in the PNW interested?

72, Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quaterly Editorial, April 1993

From: J. Sherwood Williams <netmail!jwill@cabell.vcu.edu>
To: <qrp@Think.COM>
Subject: Cheap Source for 10M Mizuho Rig
Date: Wednesday, May 05, 1993 12:00AM

Wow! I have never had so much response from ONE message in my life!

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(416) 636-3636

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Now, next I will attempt to upload a file with the specifications for the Mizuho line.... wish me luck!

Robert S. Williams

From qrp-request@Think.COM Wed May 5 16:42:21 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Wed, 5 May 93 11:28:38 PDT
Subject: RE: Cheap Source for 10M Mizuho Rig

The saga starts:

I decided I wanted one of these rigs so I just gave them a call and came away with the following points:

0. If you ask for a Mizuho MX-28S you get nowhere. If you ask for the 10m HandyTalkie then they know what you are talking a-boot.
1. The good news: the rig is only \$159 CDN if you pay by money order, cheque or cash, \$165 CDN by credit card.
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a-kevinp@microsoft.com

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To: <qrp@Think.COM>
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Robert S. Williams

From qrp-request@Think.COM Wed May 5 18:12:50 1993
From: J. Sherwood Williams <jwill@cabell.vcu.edu>
Subject: RE: Cheap Source for 10M Mizuho Rig
Date: Wed, 5 May 93 18:12:39 EDT

Complain, complain, complain! The Rig is STILL only \$165.00 US even AFTER all the shipping and stuff. What do you want? It is a \$350+ US rig going for \$165.00 and you want to niggle over their shipping and credit verification practices? Be brave, be bold, be extravagant, AND save \$150.00 US in the process. I just phoned them up and gave them a credit card Number and they verified by calling directory assistance and confirming that I was listed at the address I gave for shipping. The rig was ON MY DOORSTEP THE NEXT DAY. And the \$35.00 charged for shipping was in canadian dollars, not US dollars.... I have no complaints. :-)

Robert S. Williams

From qrp-request@Think.COM Thu May 6 12:40:03 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Thu, 6 May 93 09:35:44 PDT
Subject: RE: Cheap Source for 10M Mizuho Rig

No complaints (well, not many!) just information.

I just called Atlantic Ham Radio again and talked to Mr Lutz. He wouldn't take a credit card order over the phone (even though I told him I'm at Microsoft and a call to the operators would verify that -- guess it doesn't mean I'm not a crook :-). He was even reluctant to take a money order, but if I say I'll make no claim on warrenty then he'll sell me one. He claims that costs him money posting a bond of \$40 when the rig comes into Canada from the USA for warrenty repair. This makes it too expensive for him to sell to the US and make a profit (he isn't making much profit on these rigs, I suspect).

All in all an interesting experience, having never bought anything from Canada by mail order before. I've had less trouble buying products from a US company when i was in the UK. I don't think I had to try to persuade a dealer that he really wanted to sell me a product before!

If anyone does any better please let me know! I know J. Sherwood Williams managed to get his via a credit card order. Seems strange to get it rushed by next day air after waiting for several days for a letter to arrive. I guess I'm not really into forced instant gratification!

I also asked him if he picked up any of the 6m rigs that AEA had ... he said they had all been sold by AEA.

Despite all this I think I'll mail an order tomorrow.

72

Kevin Purcell N7WIM / G8UDP

a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From qrp-request@Think.COM Fri May 7 15:36:13 1993

Date: Fri, 7 May 93 12:36:04 PDT

From: ___Why?___ 07-May-1993 1338 <brewer@ace.enet.dec.com>

Subject: correction

my address is: Brewer@anarky.enet.dec.com

From qrp-request@Think.COM Mon Apr 26 12:42:01 1993

Date: 26 Apr 1993 11:41:29 -0500 (CDT)

From: "Jeff M. Gold" <JMG@tntech.edu>

Subject: Dayton

Hi,

For the less fortunate of us who got stuck at work this weekend:

1. any new rigs out (Icom HF?)
2. Ten Tec QRP (anyone touch the new one?)
3. Ramsey 20 meter CW/SSB? (is it going to be in kit?)

thanks

Jeff, AC4HF

From bruce@Think.COM Tue Apr 27 13:21:06 1993
From: Bruce Walker <bruce@Think.COM>
Date: Tue, 27 Apr 93 13:22:15 EDT
Subject: Dayton

I'm back from Dayton, and I believe I've caught up on all the QRP-Request messages.

My major purchase at Dayton was solar power equipment: I bought a 38W solar panel and enough batteries to keep a QRP station happy for quite a while (four new 24Ah gel cells for \$50). Field Day, here I come!

I'll build a charge controller. There have been a number of them published lately; if anyone has opinions on the best setup, let me know. I did buy a Tejas \$19 low-current (.7A) charge controller kit which I may just beef up for several Amps.

I didn't get a chance hang out with the QRP groups there, but I did join QRP-ARCI and G-QRP.

cheers,
--bruce WT1M

From qrp-request@Think.COM Thu May 6 16:31:27 1993
Date: Thu, 6 May 93 15:31:18 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Dayton

did anyone do a qrp review of dayton? did anyone go? i knew you did.
'fess up gang..... inquiring minds wanna know.

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Mon Apr 26 13:55:26 1993
Date: Mon, 26 Apr 1993 13:53:29 -0400 (EDT)
From: Eric Rosenberg <ericr@access.digex.net>
Subject: Re: Dayton

No new Icom HF rig.

Yes, there was a new Ten Tec rig -- the Scout 555, at \$495 for the radio plus one band module. Add'l band modules are \$25 each. 50 watts output CW/SSB. Optional noise blanker (no price). Shipping in July.

Ramsey 20m rig as a kit was \$299.00 Lots of \$\$ as far as I was concerned.

Eric

From qrp-request@Think.COM Mon Apr 26 15:05:27 1993
Date: Mon, 26 Apr 1993 12:04:43 PDT
From: David_Mensing.Roch817@xerox.com
Subject: Re: Dayton

Eric,

Are the Scout 555 band modules really only \$25 each?
That seems too cheap. I think a previous message listed them at \$225.

-Dave-

From qrp-request@Think.COM Mon Apr 26 15:38:55 1993
Date: Mon, 26 Apr 93 12:38:48 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: Dayton

Jeff M. Gold writes:

>

>Yes, there was a new Ten Tec rig -- the Scout 555, at \$495 for the radio
>plus one band module. Add'l band modules are \$25 each. 50 watts output
>CW/SSB. Optional noise blanker (no price). Shipping in July.

Did you ask whether it could go down to 5 watts easily?

From qrp-request@Think.COM Mon Apr 26 16:21:57 1993
Date: Mon, 26 Apr 93 13:21:54 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: Dayton

I wrote:

>Jeff M. Gold writes:

>>

>>Yes, there was a new Ten Tec rig -- the Scout 555, at \$495 for the radio
>>plus one band module. Add'l band modules are \$25 each. 50 watts output
>>CW/SSB. Optional noise blanker (no price). Shipping in July.

>

>Did you ask whether it could go down to 5 watts easily?

>

Oops, I meant that Eric R. wrote that in reply to Jeff. Sorry!

From qrp-request@Think.COM Mon Apr 26 23:32:40 1993
Date: Mon, 26 Apr 1993 23:31:59 -0400 (EDT)
From: Eric Rosenberg <ericr@access.digex.net>
Subject: Re: Dayton

On Mon, 26 Apr 1993, Paul Blumstein wrote:

> I wrote:

> >Jeff M. Gold writes:

> >>

> >>Yes, there was a new Ten Tec rig -- the Scout 555, at \$495 for the radio
> >>plus one band module. Add'l band modules are \$25 each. 50 watts output
> >>CW/SSB. Optional noise blanker (no price). Shipping in July.

> >

> >Did you ask whether it could go down to 5 watts easily?

> >

>

> Oops, I meant that Eric R. wrote that in reply to Jeff. Sorry!

Nope, but it looks like it would be an internal setting. No drive control
on the case.

From qrp-request@Think.COM Thu May 6 17:48:14 1993
Date: Thu, 6 May 93 14:48:10 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: Dayton

+did anyone do a qrp review of dayton? did anyone go? i knew you did.
+'fess up gang..... inquiring minds wanna know.

This is slightly off your topic, but of interest.

About 6 weeks ago, a local HAM club had the head of Yaesu marketing show a film & give a speech. (Hey, Yaesu & everyone else is near here).

There was a Q&A session at the end.

Afterwards, I kicked myself. (ouch!).

The marketing guy had said that they get most of their ideas and input from their customers. I blew it.

I should have said: "QRP is one of the most rapidly growing segments in HAM radio today. Does Yaesu have any plans to produce products for us?".

A few of us asking vendors questions like this may make them respond to our needs.

I am mentioning it just in case any of you are in the same position oneday.

Paul

From qrp-request@Think.COM Thu May 6 20:21:48 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Thu, 6 May 93 17:20:26 PDT
Subject: Re: Dayton

Paul Blumstein <netmail!paulb@harley.tti.com> said:

The marketing guy had said that they get most of their ideas and input from their customers. I blew it.

I should have said: "QRP is one of the most rapidly growing segments in HAM radio today. Does Yaesu have any plans to produce products for us?".

I say:

They already make QRP rigs for the home market (the 10W code-free HF licence). I know of the TS-120V and TS-130V and FT-7 but there must be many more that we never hear about (Mizuho or Tokoyo HyPower).

If they would bring these rigs into the US they would make us happy (to some extent).

Getting them to make specialised rigs is more of a problem, but if we keep asking.....

72

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From qrp-request@Think.COM Thu May 6 22:26:50 1993
Date: Thu, 6 May 93 22:23:16 EDT
From: diana@Kodak.COM (Gary Diana)

QRPers -

Yesterday, I spoke with Danny Stevig, owner of KA7QJY components of Logan UT. Nice guy, spoke with him for about 30 minutes. He is planning a vacation in a couple weeks, so if you're planning an order, he recommends doing it ASAP to avoid delays.

He is planning on offering a few kits in his new catalog (due around July '93 sometime). He is also looking into a cheap source for crystals, so us cubic inch wannabes can build the circuit without need for a \$12+shipping crystal.

BTW, I have no affiliation with KA7QJY, other than being a satisfied customer. This note is being passed along strictly FYI.

Good luck, 72, and happy homebrewing.

- Gary N2JGU
gmdiana@kodak.com OR diana@sneaks.kodak.com

From qrp-request@Think.COM Wed Apr 28 15:55:23 1993
Date: Wed, 28 Apr 93 19:37:58 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: East Coast Usenet QRP QSO Party This (First) Sunday

Why wait til June??? East Coast QRP/Usenetters: 7030-7040,

1200-1400 UTC this Sunday, May 2. If I have to start the QSO Party I will! Exchange: USE (instead of RST), name, state, power. Then, whatever else you feel like talking about. No power limits, no logs, no score, no multipliers. We can compare notes here next week. If you're reading this group, I know you'll run the minimum power necessary anyway. I'll be trying out my "new" GRC-109, crystal controlled on 7030, 7035 and 7040 (haven't finished the VFO, yet).

Call CQ USE. That oughta rattle the OTs!

If OK1CZ of the OK QRP Club is still with me, I'll let him operate. If my station gives a name of Petr, you've gotten the Czech (sorry).

72,

Jim, KR1S

--

jkearman@arrl.org

From qrp-request@Think.COM Wed May 5 22:50:33 1993
From: J. Sherwood Williams <jwill@cabell.vcu.edu>
Subject: Famous Mizuho.Personality
Date: Wed, 5 May 93 22:50:30 EDT

The fellow I mentioned who owns over 20 Mizuho QRP rigs is: Bill Ruppert WB9BQG
You can probably raise him via a message on Compuserve with any mention of the word Mizuho in the subject line. I'll try to pull up his CIS ID so you can E-Mail him.

I apologise to the group for my frequent dropped characters and typos. I am using a Hewlett Packard 95LX palmtop to access Internet via dialup: and the keyboard is really tiny..... I'm doin' the best I can.....Rilly!

Robert S. Williams

From qrp-request@Think.COM Tue May 4 15:59:52 1993
Date: Tue, 04 May 1993 12:59:54
From: hlester@as.arizona.edu (Howard Lester)
Subject: famous people

>2. we have some famous people in this group.

In what category are these people famous? (Question 1 of 20.)

HL

From qrp-request@Think.COM Tue May 4 18:16:20 1993
Date: Tue, 4 May 93 17:16:07 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: famous qrp'ers

well i don't know if i should blow the whistle
on these guys or not.

1/2 of the guys in the qrp hall of fame are in this group.FZ

can you spell famous? i knew you could.

shhhh. i didn't say a word and i didn't name names.

dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Tue May 4 19:16:49 1993
Date: Tue, 4 May 93 15:54:20 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: famous qrp'ers

+well i don't know if i should blow the whistle
+on these guys or not.

+

+1/2 of the guys in the qrp hall of fame are in this group.FZ

+

+can you spell famous? i knew you could.

+

+shhhh. i didn't say a word and i didn't name names.

+
+dit dit
+
+ Chuck Adams, K5FO @ 70+ wpm cw
+ adams@sgi.com

I don't mind acting like an idiot among friends, but in front of famous people? The mind boggles.

From qrp-request@Think.COM Wed May 5 17:53:52 1993
Subject: Field Day
Date: Wed, 05 May 1993 14:39:21 -0700
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

Hello all:

Just looking for fellow QRP addicts in the Southern California area. I like to work Field Day out in the hills here, and looking for others similarly interested. I worked with the Zuni Loop QRP Mountain Expeditionary Force (whew!) and their giant wire arrays last year....and enjoyed a real good earthquake (we were close to the epicenter in Wrightwood, CA.)

I will probably work with the Zuni Loopers again (really insane, fun bunch of guys, and good food) but am curious as to who else is out there, where they go and with what sorts of equipment and intentions. If any of you are without a Field Day affiliate and want to fill in on 40 CW after I fade, let me know!!

72

Clark

.....

Clark Savage Turner, Graduate Student Researcher
Safety Critical Software Group home:
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717 Irvine, CA. 92715
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526, active on HF, VHF and UHF.
Your "QRP Attorney"....
Admitted to practice law in California, Massachusetts, and New York.
ARRL Volunteer Counsel

From bruce@Think.COM Tue May 4 10:06:24 1993
From: Bruce Walker <bruce@Think.COM>
Date: Tue, 4 May 93 10:06:23 EDT
Subject: Field Day / Solar+Battery

Apologies to those also on the CQ-CONTEST list, where this was already discussed, but it's relevant here, too. Apologies also to the DX on the list, who probably don't care about this subject!

I've been getting ready to do Field Day using Solar+Battery power, which I've never done before. So, I read the rules, and found a surprise (at least to me). The "Battery" category applies to any power source other than commercial mains or motor-driven generator (batteries, solar, wind generator, ...). However, there is a rule in the scoring section which says that except for Class C mobile operation, batteries may not be charged while in use.

This implies that it's not within the battery category rules to have a solar panel providing power to a battery while operating from the battery, even though operation direct from battery or direct from solar panel is OK for that category. Floating a solar panel across a battery is the "obvious thing" with that set of equipment, especially if you only wanted to use one battery. I thought the rule was silly.

After talking with a few people, the consensus was that the rules meant to say you can't use a motor-driven generator to charge a battery while it's in use. That makes sense, since it disallows using a power source not allowed in the battery category while operating off the battery. Anyway, I guess it comes down to the spirit or the letter of the law. There's also a reasonably easy workaround: you can operate off of one battery while charging another with the panel.

--bruce WT1M

From qrp-request@Think.COM Tue May 4 18:22:53 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Tue, 4 May 93 15:22:35 PDT
Subject: Re: Fireball

Hmmm, nobody caught the obvious error(s) in my otherwise good post or perhaps you are all such nice guys that you thought you wouldn't mention it :-)

A square wave (with 1:1 mark:space ratio) has only odd harmonics. This means the basic ideas presented are OK (and the basic conclusion is unchanged -- you need a LPF on the output) but the numbers are wrong.

The amplitudes of the harmonics of a square wave goes as $1/n^2$ (did I get this wrong too?)

The first spurious emission is the third harmonic which will be $1/9$ of the fundamental in amplitude and $1/81$ of the power of the fundamental (power goes as the voltage squared). This implies the spurious

emissions are about -19dBc. The FCC wants -40dBc or better.

Anyone got a spectrum analyzer and a square wave oscillator to check this revised figure?

72, Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From qrp-request@Think.COM Sat May 1 04:21:39 1993
Subject: Fireball harmonics
From: jjw@precipice.chi.il.us (John Welch)
Date: Fri, 30 Apr 93 18:25:20 CDT

From: jpo@acd4.acd.com (Jim Osburn)

>I read the description of the Fireball transmitter in the April QQ.
>I wonder about the harmonics emitted.
>I suppose the antenna system will attenuate them some.
>And, the power level probably insures that they're real small.
>But, I wonder what kind of interference problems there are.
>Can someone enlighten me?
>
>Jim, WD9EYB

Jim, the harmonics are *terrible* on those rigs! To be FCC legal below 5 watts, the spurious emissions must be more than 30 db down, and on square-wave oscillators they are usually about 6 db down.

If the tuner used is a pi-network, that provides some more attenuation. True, the absolute level of the harmonics is low, but to be perfectly legal they need a lot more filtering. A simple 5 or 7 pole Chebychev low-pass filter should do the trick nicely.

I suspect, however, since the actual harmonics are at a low level that the FCC most likely won't be out to bother anybody using such a rig.

-->jjw

From qrp-request@Think.COM Wed Apr 28 12:20:25 1993
Date: Wed, 28 Apr 1993 10:19:46 EDT
From: "Fred Cady iee@c@msu.oscs.montana.edu" <fred_c@ece.ee.montana.edu>
Subject: ft-101e controls

I recently picked up a nice FT-101E w/o a manual but a friend lent me his manual. Unfortunately his manual does not show a control that is

on the front panel of my FT-101. Concentric with the Clarifier knob is a control marked "Level". Can anybody tell me what that is for?
Tnx and 73 Fred KE7X

From qrp-request@Think.COM Tue May 4 11:20:37 1993
Date: Tue, 04 May 93 14:14:16 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Group?

One of the appealing aspects of QRP is the rabid fervor of other QRPers. You don't meet too many QRPers who are lukewarm about using low power, building equipment, operating Field Day, or whatever particular areas meet their fancy.

There _has_ been a lot of mail on the list, but I think that's largely because it's new and we're just getting acquainted. If you're a died-in-the-wool QRPer, you'll read through it all, unless receiving it causes a financial hardship.

One thing I've learned as a reader, writer and editor of material about QRP is, we've said about all there is to say on the subject! That's not to say that additional articles aren't needed to inspire newcomers, but there really are a ton of books out there. ARRL alone publishes five books that have to do with QRP. Then there are books by Dave Ingram and Rich Arland, G-QRP, and Adrian Weiss. I receive five QRP club newsletters.....

I see this list developing into a place to get info on parts, to buy and sell gear, and to arrange operating events. I think in a short time, the mail volume will drop quite a bit. I don't know how many readers we have, but I doubt we have enough to warrant another rec.radio.amateur group. I suggest we keep the list as is for the time being. In six months, if mail volume remains high (which I doubt will be the case), we can then consider other alternatives.

72,

Jim, KR1S

--
jkearman@arrl.org

From qrp-request@Think.COM Wed May 5 17:59:36 1993
Date: 05 May 1993 16:59:12 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: handi talkies

I would be interested in these radios.. but I haven't even heard a peep on 10m in a long time.. probably why there selling the 10m version so cheap.. (I think it is going for \$350 for the others).. Sure would like a 17m or 20 meter version.

=====

From: IN%"a-kevinp@microsoft.com" "Kevin Purcell" 5-MAY-1993 16:44:21.84
To: IN%"qrp@Think.COM"
CC: IN%"n7rzd@u.washington.edu"
Subj: RE: Cheap Source for 10M Mizuho Rig

Return-path: <qrp-request@Think.COM>
Return-path: a-kevinp@microsoft.com
Received: from mail.think.com by tntech.edu (PMDF #3874) id <01GXTN76FGHSJ58QJ6@tntech.edu>; Wed, 5 May 1993 16:43:31 CDT
Received: by mail.think.com; Wed, 5 May 93 14:32:47 -0400
Received: from Think.COM by mail.think.com; Wed, 5 May 93 14:32:41 -0400
Received: from netmail.microsoft.com by Early-Bird.Think.COM; Wed, 5 May 93 14:32:31 EDT
Received: by netmail.microsoft.com (5.65/25-eef) id AA21818; Wed, 5 May 93 11:30:35 -0700
Date: 05 May 1993 11:28:38 -0700 (PDT)
From: Kevin Purcell <a-kevinp@microsoft.com> (Rho)
Subject: RE: Cheap Source for 10M Mizuho Rig
To: qrp@Think.COM
Cc: n7rzd@u.washington.edu
Message-id: <9305051830.AA21818@netmail.microsoft.com>
Content-transfer-encoding: 7BIT
X-Msmail-Message-Id: 9483002B
X-Msmail-Conversation-Id: 9483002B
X-Msmail-Fixed-Font: 0001

The saga starts:

I decided I wanted one of these rigs so I just gave them a call and came away with the following points:

0. If you ask for a Mizuho MX-28S you get nowhere. If you ask for the 10m HandyTalkie then they know what you are talking a-boot.

1. The good news: the rig is only \$159 CDN if you pay by money order, cheque or cash, \$165 CDN by credit card.
2. The bad news: The only shipping mode they use to the USA is UPS next day air for \$38 (gasp! You can build a rig for that!)
3. The worst news: I got a shop person who consulted with their manager and he wouldn't take my order over the phone. They have had problems with credit card fraud and bad addresses. He told me to call and talk to their owner (Mr Lutz) tomorrow about a credit card order. I presume they don't have online credit card validation in Ontario yet, eh?
4. They will ship to the US on a money order (no GST) for the right amount in shipping.

So I haven't ordered one yet :-(Anyone else succeeded yet. Perhaps they are wondering why they have a lot of weird American calls for this rig in the past day?

With the big shipping fee I'm thinking of consolidating a couple of orders. Any one in the PNW interested?

72, Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."
-- QRP Quaterly Editorial, April 1993

From: J. Sherwood Williams <netmail!jwill@cabell.vcu.edu>
To: <qrp@Think.COM>
Subject: Cheap Source for 10M Mizuho Rig
Date: Wednesday, May 05, 1993 12:00AM

Wow! I have never had so much response from ONE message in my life!

Thanks for making me feel so welcome on the QRP mailing list. Here are the specifics for ordering the A.E.A. versions (made by Mizuho in Japan) MX-28S from the outfit that bought the entire line from AEA when AEA stopped selling them. J-Com is the current USA distributor for the Mizuho line.

Only the 10 Meter version is on sale. You can order from the USA via telephone using a credit card and have the unit the next day via UPS Red Label from Canada.

Atlantic Ham Radio LTD.
368 Wilson Ave.

Downsview, Ontario
Canada M3H 1S9
(416) 636-3636

The total cost: including the credit card currency conversion fee and the UPS next-day Air delivery is \$200.00 CDN or \$165.00 US

The UPS Customs clearinghouse will send you a bill for about \$7.00 to pay the US Customs on the purchase.

Now, next I will attempt to upload a file with the specifications for the Mizuho line.... wish me luck!

Robert S. Williams

From qrp-request@Think.COM Tue May 4 19:17:20 1993
From: danbl@arcturis.cna.tek.com (dan;923-4455)
Date: Tue, 4 May 1993 16:00:37 GMT
Subject: High Efficiency Switching Regulators

Both Siliconix and Linear Technology are sources for Synchronous Switching Regulators. As Kevin Purcell pointed out, efficiencies greater than 90% can be expected. Although the technique for Synchronous Switching Regulators has been available for many years, their widespread use has until recently been precluded due to their complexity. Now available in IC form, although not as simple to use as LM317s, their complexity is greatly eased due to their integration. Advantages are that they can source highly variable loads without the tendency toward instability at light loading - indeed several amps can be supported with idling in the microamp range. Disadvantages (or rather concerns) would be the variable frequency nature of their operation and special care required for such fine points as low ESR output capacitors -

Linear Technology	LTC1148	(input voltages up to 16V)
" "	" "	" "
" "	LTC1149	(" " " 60V)

-Daniel Blakley KB6MHN

--

From qrp-request@Think.COM Sun Apr 25 11:02:28 1993
Date: Sun, 25 Apr 1993 10:04:31 -0500 (CDT)

From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>
Subject: home-brew dxcc

I think I've mentioned before to this group that one of my current ham interests is 30 meter qrp dx, and that I'm soon planning some decent antennas for that purpose.

I've been thinking about all the hassles involved with getting qsl cards, verifying them, and sending them off for evaluation...plus the fact that dxcc is not available on 30 meters anyway. I finally decided I like communicating by radio, not by post card, so I will NOT make a big deal of getting qsl confirmation. Instead, for my personal record keeping I'll count all qso's in my log that include an exchange of calls and rst's, and when my count gets to 50 countries, I'll use my word processor to make a nice certificate to hang on my wall...and every additional 50 countries thereafter. And I'll announce my progress here periodically.

For me this will be as satisfactory a way of marking and celebrating the meeting of the qrp dx challenge as any.

Wonder if anybody else approaches DX this way?

Cheers & 73!

Jim K5YUT

(P.S. Incidentally, the above does not mean I don't enjoy getting qsl cards, or that I won't send them...I'm glad to, if someone wants them. It's just that I don't want to turn my hobby into one of collecting cards!)

From qrp-request@Think.COM Sun Apr 25 12:34:28 1993
Date: Sun, 25 Apr 93 15:56:59 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Re: home-brew dxcc

James Speer <F_SPEERJR@CCSVAX.SFASU.EDU> writes:

> I think I've mentioned before to this group that one of my current ham
>interests is 30 meter qrp dx, and that I'm soon planning some decent antennas
>for that purpose.
> I've been thinking about all the hassles involved with getting qsl cards,
>verifying them, and sending them off for evaluation...plus the fact that dxcc
>is not available on 30 meters anyway. I finally decided <deleted> I'll count
>all qso's in my log that include an exchange of calls and rst's, and <deleted>
>I'll announce my progress here periodically.
>
> <deleted>
>
> Wonder if anybody else approaches DX this way?
>
>Cheers & 73!
>Jim K5YUT

>(P.S. Incidentally, the above does not mean I don't enjoy getting qsl cards, or
>that I won't send them...I'm glad to, if someone wants them. It's just that I
>don't want to turn my hobby into one of collecting cards!)

>

>

In "The Complete DXer," Bob Locher says DXing is what you make of it. You set your own goals, etc. After a couple of frantic years in the pileups and a book of my own, I, too, got tired of chasing the paper. I quit about two years ago, as I recall working Baldur when he was in Mt Athos, right after returning from Dayton in 1991. I never wrote for the card. I've even stopped chasing DX, outside of contests. If you tell me you have the cards for the Honor Roll, but haven't turned them in, I'll believe you (and the DXCC desk will thank you!).

We don't have to let others' goals determine our own. This is, after all, a hobby!

72,

Jim, KR1S

In the office having a ball cannibalizing some old junk for parts to build a power supply for the GRC-9, which is the next surplus acquisition.

And what about a Usenet QRP QSO Party? No scoring, etc, just get on and say "hi." The exchange could be the usual stuff, but USE instead of RST, or something like that. WATSA OMS ES YLS?

--

jkearman@arrl.org

From qrp-request@Think.COM Sun Apr 25 20:40:22 1993

From: g-taylor4@tamu.edu

Date: 25 Apr 93 19:39:38 CDT

Subject: Re: home-brew dxcc

> > I've been thinking about all the hassles involved with getting qsl cards,
> >verifying them, and sending them off for evaluation...plus the fact that dxcc
> >is not available on 30 meters anyway. I finally decided <deleted> I'll count
> >all qso's in my log that include an exchange of calls and rst's, and <deleted>
> >I'll announce my progress here periodically.

Well I've got about 173/157 mixed from this QTH and keep telling myself I'll get around to applying for the certificate when I get the few cards I need for ssb dxcc. But then maybe I won't but I'm still having fun. On a related note, if I recall correctly there was some discussion of requiring

qsls for awards in QQ recently.

> And what about a Usenet QRP QSO Party? No scoring, etc, just get on
> and say "hi." The exchange could be the usual stuff, but USE instead
> of RST, or something like that. WATSA OMS ES YLS?
>

72, Greg

```
*****
Dr. Gregory S. Taylor      !MAIL:  110 Dairy Science Building
Extension Program Leader for  !      College Station, TX 77843-2124
Community Development      !VOICE: 409-845-4445
Texas Agricultural Extension Service!FAX:  409-847-8744
Texas A&M University System  !EMAIL: Reply or g-taylor4@tamu.edu
*****
```

From qrp-request@Think.COM Fri May 7 14:27:58 1993
Date: Fri, 7 May 93 14:27:45 EDT
From: rar3h@phil.cs.virginia.edu
Subject: HW-8 VFO

Has anyone ever noticed how accurate the tuning dial on an HW-8 is? When compared to a calibrated receiver, the HW-8 is +/- 5KHZ. Is this about right from your observations?

Bob Ross WA2MFI
rar3h@virginia.edu

From qrp-request@Think.COM Tue Apr 27 07:42:50 1993
Date: Tue, 27 Apr 93 07:43:50 -0400
From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith;WR-ALC/653 CCSG/SCDD)
Subject: Re: HW-9

In your message of 23 Apr 1993 at 0959 EDT, you write:
>
> everyone gone to dayton?

Absolutely!!! If you don't go to Dayton and get rained on in April, the whole year is just shot!!!

Personally, I brought home every Heathkit single bander that I could find.. along with a pickup full of miscellaneous... I might get it all

sorted out before I head back, next year 8-}

73,

Larry KQ4BY

From qrp-request@Think.COM Mon Apr 26 11:38:40 1993
Date: Mon, 26 Apr 1993 09:38:02 EDT
From: "Fred Cady iieefc@msu.oscs.montana.edu" <fred_c@ece.ee.montana.edu>
Subject: hw-9 finals

I think I have found a dead hw-9 and the guy I am getting it from thinks the finals are blown. I havn't seen it yet to test but would like to get the finals in hand asap. Can somebody tell me what the transistor(s) are? Are there two? What is the best source of supply.

Tnx and 73 Fred Cady, KE7X, [iieefc@msu.oscs.montana.edu]

From qrp-request@Think.COM Tue Apr 27 01:01:22 1993
Date: Tue, 27 Apr 93 00:01:10 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Re: hw-9 finals

the final transistors, two in parallel for the finals in the hw-9 are MRF237's. i don't have a substitute number, but i'm sure there is one. i don't see one in OHR's catalog and i can't find KA7 catalog of small parts.

hope this info helps.

chuck k5fo CP-60 dit dit

From qrp-request@Think.COM Mon Apr 26 12:19:52 1993
Date: Mon, 26 Apr 93 16:10:18 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: I asked Zack Lau to answer the question about toroids

>From z1@z1 Mon Apr 26 15:32:23 1993
Received: from z1 by jek with SMTP
id AA2406 ; Mon, 26 Apr 93 15:32:23 GMT
Date: Mon, 26 Apr 93 00:20:16 GMT

Message-Id: <47380@z1>
From: z1@z1 (Zack Lau)
To: jek@jek
Subject: Re: Can you help this sinner?

There have not been reports of iron powder toroids being damaged by excessive heat, though they won't function properly if they get too hot (but will if they get to cool back down). This also assumes that they didn't break into little pieces.

I assume you are properly packaging this transmitter and grounding the chassis. Unfortunately, this design may not be well behaved in the presence of RF fields due to its use of high impedance/gain circuits.

From qrp-request@Think.COM Wed May 5 11:59:17 1993
Date: Wed, 5 May 93 5:59:01 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: Jim' VFO

Jim, WD9EYB, just wrote about his newly build (and working) VFO (great job, Jim). In his article he mentioned using an unspecified variable capacitor; my question is, how difficult and/or accurate is it to try to measure the area of one of the plates, the spacing between the plates, and calculate the actual capacitance? I guess a micrometer is needed to determine the spacing between the plates, right? Gosh, what a headache!

Is there an easier way??

Jeff NH6IL

From qrp-request@Think.COM Wed May 5 13:02:09 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Wed, 5 May 93 10:01:26 PDT
Subject: RE: Jim' VFO

Build an oscillator (not much to it a FET GDO thing is all you need) and stick a frequency counter on the output.

Compare the variable cap to some fix value caps you can switch into the circuit.

A little bit of math will tell you the numbers you want.

Kevin Purcell N7WIM / G8UDP

a-kevinp@microsoft.com

"We conjure the spirits of the computer with our spells"

From: Jeff Herman <netmail!jherman@uhunix.uhcc.Hawaii.Edu>
To: <qrp@Think.COM>
Subject: Jim' VFO
Date: Wednesday, May 05, 1993 12:00AM

Jim, WD9EYB, just wrote about his newly build (and working) VFO (great job, Jim). In his article he mentioned using an unspecified variable capacitor; my question is, how difficult and/or accurate is it to try to measure the area of one of the plates, the spacing between the plates, and calculate the actual capacitance? I guess a micro-meter is needed to determine the spacing between the plates, right? Gosh, what a headache!

Is there an easier way??

Jeff NH6IL

From qrp-request@Think.COM Wed May 5 13:39:57 1993
Date: Wed, 5 May 1993 10:43:06 -0800
From: burdick@interval.com (Wayne Burdick)
Subject: Re: Jim' VFO

If you don't have a capacitance meter, here's another way to accurately measure the value of any small cap, including a variable:

1. Build a simple VFO circuit that operates around 3 or 4 MHz. One from the Handbook will do.
2. Measure the frequency of the VFO when a few different KNOWN value caps are paralleled with one of the existing VFO capacitors (one that is connected to the inductor). The known caps should be 5% or better, mica or polystyrene preferably, having values of say 15, 75, and 150 pF.
3. Plot this data (freq vs. cap size) on graph paper, and draw a line connecting the points. The relationship should be roughly linear unless you used a very high or very low L/C ratio in your VFO circuit.
4. Test unknown caps by paralleling them into the VFO circuit.

This method works very well for me. You can even get a rough idea of the capacitance of diode and transistor junctions this way, assuming that you isolate the component from the VFO's DC path.

73,
Wayne, N6KR

Wayne Burdick
wayne@interval.com
(415) 354-0928

Interval Research Corp.
1801-C Page Mill Road
Palo Alto, CA 94304

From qrp-request@Think.COM Wed May 5 14:41:40 1993
Date: Wed, 5 May 93 13:48:47 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: Jim' VFO

There are much better ways. Here are just 4 of them.

1. Build a L/C tuned oscillator (using know L and C values). Measure the frequency with a frequency counter. Add the unknown C to the tuned circuit and again measure the frequency. Than solve twice for C using the formula for resonance. The difference in C will be the value of the unknown C.
2. If you don't want to build an oscillator, just build a parallel L/C tank circuit and with a grid dip meter, determine the resonant frequency. If the L is known, just solve for C. If L not known, make 2 tanks (changing C) and with the 2 readings, you can solve for the unknown C. Note: Since most grid dip meters do not have sufficient calibration, its helpful to measure the grid dip meter frequency with a frequency counter.
3. Build a simple ac bridge circuit (see "test and measurement chapter in most handbooks for circuit details).
4. Using a couple of NE555 IC's its easy to build up a circuit to measure capacitance directly using a frequency counter or dvm. Most project books for the NE555 have circuit details (or see back issues of ham radio publications, popular electronics etc.). I've built several of these and they measured from a few pF to many uF with accuracy of better than 3%.

73's

Ed W1AAZ

From qrp-request@Think.COM Wed May 5 15:29:33 1993
Date: Wed, 5 May 93 15:29:29 -0400
From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith;WR-ALC/653 CCSG/SCDD)
Subject: Re: Jim' VFO

In your message of 5 May 1993 at 1254 EDT, you write:

>
> Jim, WD9EYB, just wrote about his newly build (and working) VFO (great
> job, Jim). In his article he mentioned using an unspecified variable
> capacitor; my question is, how difficult and/or accurate is it to
> try to measure the area of one of the plates, the spacing between
> the plates, and calculate the actual capacitance? I guess a micro-
> meter is needed to determine the spacing between the plates, right?
> Gosh, what a headache!
>
> Is there an easier way??

Yes, For about \$70.00, you can buy an digital capacitance meter...
8-}

Larry KQ4BY...

From qrp-request@Think.COM Wed May 5 16:11:35 1993
Date: Wed, 5 May 1993 10:43:06 -0800
From: burdick@interval.com (Wayne Burdick)
Subject: Re: Jim' VFO

If you don't have a capacitance meter, here's another way to accurately measure the value of any small cap, including a variable:

1. Build a simple VFO circuit that operates around 3 or 4 MHz. One from the Handbook will do.
2. Measure the frequency of the VFO when a few different KNOWN value caps are paralleled with one of the existing VFO capacitors (one that is connected to the inductor). The known caps should be 5% or better, mica or polystyrene preferably, having values of say 15, 75, and 150 pF.
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This method works very well for me. You can even get a rough idea of the capacitance of diode and transistor junctions this way, assuming that you isolate the component from the VFO's DC path.

73,
Wayne, N6KR

Wayne Burdick
wayne@interval.com
(415) 354-0928

Interval Research Corp.
1801-C Page Mill Road
Palo Alto, CA 94304

From qrp-request@Think.COM Fri May 7 14:57:25 1993
Date: Fri, 7 May 93 13:42:23 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: K5FO DX Expedition (Mini)

next week i'll be traveling to houston tx for one week of fun and sun!
actually, i'm supposed to be working, but hey, what the heck.

i'll be carrying the following: (driving rent-a-van)

- a. Uniden HR-2510 for 10 meters, qrp mobile cw (what a handicap)
and I WILL CARRY the microphone ;-0
- b. a&a 20 meter rig
- c. OHR 30 meter rig
- d. MXM new 40 meter xcvr

heath qrp wattmeter and tuner and pile of wire.

email me your experiences with hotel rooms and wires and what works
best. i'll summarize to the net or you can post. makes no diff to
me.

i'll be on everynite starting highest band and working down as
they close. look at the qrp calling freqs. look on 10 if it's
open on sunday afternoon (SSB first, CW second) for mobil work.

work rare counties. i'll drive 40 miles outta the way if its
toward houston from dallas along I45.

72 (good qrping) es bcnu on the road,

dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Thu May 6 14:11:31 1993
Date: 06 May 1993 13:11:16 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: Mail Order->Canada

Well,

I saw a nice straight key in the CQ Radio Kits catalogue out of Bradford, Ont. I sent a plain old personal check.. I got the key.. best I have ever seen in perfect condition in about a week.. he didn't even have time for the check to clear.

I mailed an order to Schurr Keys in W. Germany for a set of mini-paddles and had to use a bank check.. but in a very short time the paddles came air-mailed to me.. NO PROBLEM.

Sounds to me like the guy in Canada with these rigs is a little bit bananas.. I would like to buy one.. but won't buy one under conditions of having to beg with one and have it come with no warranty.. sounds a wee bit fishy.

73

Jeff

From bruce@Think.COM Thu May 6 12:58:32 1993
From: Bruce Walker <bruce@Think.COM>
Date: Thu, 6 May 93 12:58:32 EDT
Subject: mailing list stuff

QRPers,

A couple of more administrative notes about the mailing list. First of all, including portions of previous messages in your replies to the list is OK, but please try to keep it to a minimum necessary for context. We generally don't need to see the whole original message every reply. Many people find it annoying to get three lines of reply which include thirty lines of original.

Second, a few people have had problems responding to mail on the list, finding that when they use the "reply" feature of their mailer, it goes to qrp-request@think.com rather than qrp@think.com. This could either be the fault of the person's mailer or the list mailer here. The mail headers you receive should list the "To:" address as QRP@Think.COM. The "From:" address should be the person who sent the message, not qrp-request. If there is a "Sender:" header, it should be qrp-request@think.com. There

should be no "Reply-To:" header unless the original person who sent the message put one in. If you think the mail is incorrect as you receive it, please send me a note at qrp-request@think.com, and include headers of a sample message if you can. Thanks!

--bruce WT1M

From qrp-request@Think.COM Wed May 5 18:37:13 1993
Date: Wed, 5 May 93 12:37:03 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: measuring variable caps

WOW! What a response! Both my mailbox and the net have contained so many good suggestions as to measuring a variable cap. I'm low tech and cheap so I'll measure the plate area and use a spark plug/valve 'feeler' gauge (shim gauge?) to measure the spacing between the plates, to initially get an approximate value, then go from there....

Thanks so much!

Low tech, cheap, and lazy, Jeff NH6IL

From qrp-request@Think.COM Wed May 5 13:58:32 1993
Date: Wed, 5 May 93 12:58:22 CDT
From: dadams@cherry.cray.com (David Adams)
Subject: MFJ

While thumbing through my most recent issue of QST I noticed an add for an MFJ QRP transceiver. I don't remember the price, but it was close to \$150 or \$160. The thing I was disappointed most about was that for most bands it only covered a small portion of the band. Is this normal for such a transceiver? The other thing of course is that it only covers one band, but then I suppose most rigs that cover more than one band cost quite a bit more. (But then I sort of have this gut feeling like I shouldn't have to pay as much for QRP as for higher wattage--that was supposed to be one of the attraction of QRP--that you could get on the air for fewer \$\$.)

What do others think of the rig?

--David C. Adams Statistician Cray Research Inc. dadams@cray.com

They moved all the streets around while you were sleeping last night.

From qrp-request@Think.COM Wed May 5 17:03:24 1993
Date: Wed, 5 May 93 12:58:22 CDT
From: dadams@cherry.cray.com (David Adams)
Subject: MFJ

While thumbing through my most recent issue of QST I noticed an add for an MFJ QRP transceiver. I don't remember the price, but it was close to \$150 or \$160. The thing I was disappointed most about was that for most bands it only covered a small portion of the band. Is this normal for such a transceiver? The other thing of course is that it only covers one band, but then I suppose most rigs that cover more than one band cost quite a bit more. (But then I sort of have this gut feeling like I shouldn't have to pay as much for QRP as for higher wattage--that was supposed to be one of the attraction of QRP--that you could get on the air for fewer \$\$.)

What do others think of the rig?

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They moved all the streets around while you were sleeping last night.

From qrp-request@Think.COM Wed May 5 18:08:38 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Wed, 5 May 93 15:05:39 PDT
Subject: RE: MFJ

Remember:

1. QRP rigs have to have all the stuff a QRO rigs have, they just miss the linear (generally just one stage of the PA). Missing this off doesn't save much money. In fact the smaller volume production tends to increase costs. Check out the high volume Japanese rigs (which can all go QRP easily these days). The TS140 and IC-735 make excellent all band QRP rigs.

2. QRP rigs are often aimed at the CW market (this MFJ rig is) and all the CW activity is below 14080. Activity above 80kHz above the band edge is the other digital modes: RTTY, Amtor, Packet etc. The QRPers tend to cluster around 60kHz above the band edge (in the US -- the rest of the world is sometimes different on different bands). So the rig covers the range you would want given the limitations of the mode. There is no sideband on this rig so there is not much point in covering a higher frequency.

72, Kevin Purcell N7WIM / G8UDP

a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quaterly Editorial, April 1993

From: David Adams <netmail!dadams@cherry.cray.com>

To: <qrp@Think.COM>

Subject: MFJ

Date: Wednesday, May 05, 1993 12:58PM

While thumbing through my most recent issue of QST I noticed an add for an MFJ QRP tranceiver. I don't remember the price, but it was close to \$150 or \$160. The thing I was disapointed most about was that for most bands it only covered a small portion of the band. Is this normal for such a tranceiver? The other thing of course is that it only covers one band, but then I suppose most rigs that cover more than one band cost quite a bit more. (But then I sort of have this gut feeling like I shouldn't have to pay as much for QRP as for higher wattage--that was supposed to be one of the attraction of QRP--that you could get on the air for fewer \$\$.)

What do others think of the rig?

--David C. Adams Statistician Cray Research Inc. dadams@cray.com

They moved all the streets around while you were sleeping last night.

From qrp-request@Think.COM Wed May 5 18:08:00 1993

Date: Wed, 5 May 1993 17:03:30 -0500 (CDT)

From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>

Subject: MFJ rigs

>While thumbing through my most recent issue of QST I noticed an
>add for an MFJ QRP tranceiver. I don't remember the price, but
>it was close to \$150 or \$160.

That's about right.

> The thing I was disapointed most
>about was that for most bands it only covered a small portion of
>the band. Is this normal for such a tranceiver?

My 30m MFJ rig covers the whole band. I believe the other rigs cover the entire portion that is normally used for CW. And as far as I know, that is

conventional for QRP rigs.

>The other thing
>of course is that it only covers one band, but then I suppose most
>rigs that cover more than one band cost quite a bit more. (

Monobanders are now conventional, partly because they're easy to make portable, partly because they're SO MUCH easier to build, and partly for the related reason that they're so much cheaper.

>But
>then I sort of have this gut feeling like I shouldn't have to
>pay as much for QRP as for higher wattage--that was supposed to
>be one of the attraction of QRP--that you could get on the air
>for fewer \$\$.)

Where can you get a higher-powered monobander for \$160 or so? I'll have one!

>What do others think of the rig?

I love my 30m unit.. especially the receiver, which is a single-conversion superhet (not a DC, like so many of the QRP rigs, including my HW-8), with much dynamic range, excellent agc, excellent selectivity, and adequate sensitivity. I get very good reports on the sound of the transmitter, and these come from knowledgable folk who actually know what clicks and chirps sound like.

My only complaint, and one MFJ has told me how to fix, but which I haven't fixed yet, is that after longish periods of transmitting I get a little drift. MFJ say it's the L0 crystal expanding with the increase in ambient temperature due to the finals. They have told me how to heat sink the crystal to stabilize it (something I'd never have thought of doing, but they say it's an old commercial op's trick), and they say if that doesn't work, they'll send me another crystal (presumably not ALL L0 crystals exhibit the problem).

In short, I love it, and I've found MFJ helpful and cooperative.

>--David C. Adams Statistician Cray Research Inc. dadams@cray.com

>They moved all the streets around while you were sleeping last night.

Cheers & 72!

Jim K5YUT

From qrp-request@Think.COM Thu May 6 15:28:54 1993
Date: Thu, 6 May 93 14:28:45 CDT

From: dadams@cherry.cray.com (David Adams)
Subject: MFJ xcvr

Someone commented that using only a small subportion of the bands was normal since those were the CW portions. I find this reasoning to be a little harsh since those portions do not even include the novice portions of the bands. (Of the bands that have novice portions.) And novices are only allowed to use CW!

Also Kevin Purcell (N7WIM) wrote:

> QRP rigs have to have all the stuff a QRO rigs have, the just miss
> the linear (generally just one stage of the PA). Missing this off
> doesn't save much money...

They often don't cover all of the band. They only cover one band. They offer one mode of operation. No SSB etc. They have no bells and whistles for which the modern rigs charge more money like frequency memories, and fancy LEDs and blinkinlights and direct access tuning (just punch in the numbers) and frequency counters*, and there is probably lots more. It isn't that I want a lot of bells and whistles. I am just surprised at how dropping them does not necessarily mean a drop in price.

*I might be confused on this point. The ARRL Advanced class exam preparation book seemed to indicate that most modern rigs have a frequency counter used to display the frequency. I don't know if this means, for example, that the Icom IC-735 does or not.

--David C. Adams Statistician Cray Research Inc. dadams@cray.com

Still waiting for a licence. (General + 1c.)

They moved all the streets around while you were sleeping last night.

From qrp-request@Think.COM Thu May 6 17:00:46 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Thu, 6 May 93 13:57:14 PDT
Subject: RE: MFJ xcvr

Read my post again!

The first statement was refereing to QRP rigs that are derived from QRO rigs (Argo II, TS-120V, TS-130V, TS-140V (dunno if this exists), low power version of IC-725 and 726). These are either made as dedicated

QRP rigs (and have small runs) or are made for the Japanese 10W HF no-code licencees and are not sold outside Japan.

The other QRP rigs are made in small quantities (by people not robots) and cost more as a consequence of having such a small volume production. Remember Icom, Yaesu, Kenwood supply the world. MFJ is really only aimed at the US market, though you can get them in the UK too.

Also the blinkenlites are mostly a software cost for the controller. This can be large and works better for a unit with high volume sales.

Not covering noise bands is done for several reasons:

1. Novices are usually pretty bad at copying weak signals (not a slight its the truth!). There is no driving force from the users for this in a portable rig.

2. For CW work with a tight filter you want a low tuning rate. With the given components (vernier drives) that are easily available and the requirement for a slow tuning rate (25kHz per turn or less) to make it easy to use they're encouraged to limit the span covered. This general goes from the bottom of the band to where the digital guys take over.

An all singing all dancing all band portable single conversion (50MHz IF) QRP rig with digital readout, optical encoder dial, that can work split, that'll run for a weekend on a single gelcell that would sell for \$600 would be great. But there aren't any rigs out there like that (yet!). KG7ME has a working prototype of a rig fitting these goals and is considering putting it into production. I have seen it at a NW QRP club meeting and it may be at the Convention in Seaside, OR this June if you want to see it. Maybe that'll be the answer to our problems.

The market is there you just need some entrepreneurs that can fill it.

72

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From qrp-request@Think.COM Wed May 5 13:55:34 1993
Date: Wed, 5 May 1993 12:55:16 -0500 (CDT)
From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>
Subject: micrometer no, shim gauge si

>Jim, WD9EYB, just wrote about his newly build (and working) VFO (great
>job, Jim). In his article he mentioned using an unspecified variable
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>try to measure the area of one of the plates, the spacing between
>the plates, and calculate the actual capacitance? I guess a micro-
>meter is needed to determining the spacing between the plates, right?
>Gosh, what a headache!
>
>Is there an easier way??

Sure. Use a set of shim gauges like the ones you can get for setting various
clearances in automotive engines.

>
>Jeff NH6IL

Cheers & 73!

Jim K5YUT

From qrp-request@Think.COM Wed May 5 16:49:02 1993
Date: Wed, 5 May 1993 12:55:16 -0500 (CDT)
From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>
Subject: micrometer no, shim gauge si

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clearances in automotive engines.

>
>Jeff NH6IL

Cheers & 73!

Jim K5YUT

From qrp-request@Think.COM Wed May 5 09:18:26 1993
Date: Wed, 5 May 93 08:18:19 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Mizuho Posting

Thanks to Sherwood and the length posting.

it is this kind of information and distribution thereof that we need. i know it takes a lot of bandwidth, but it's stuff we don't easily get hold of in QQ and only periodically in QST reviews.

again many many thanks. keep those cards and letters coming.

72 de k5fo es gl es bcnu agn, dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Tue May 4 12:54:33 1993
From: J. Sherwood Williams <jwill@cabell.vcu.edu>
Subject: Mizuho Rigs
Date: Tue, 4 May 93 12:54:29 EDT

I went through the directory file last night and didn't see any Mizuho/AEA QRP rigs listed. Is there anyone besides me that is using the A.E.A Mx-28S (or other models for other bands) ?? I am interested in any possible mods or enhancements to these rigs.

I found one guy over on Compu\$erve that collects the Mizuho rdios and owns over 20 of them. Must have cost him a bundle. I bought mine on sale (\$160 delivered via UPS Red label) from an outfit in Canada. I would be glad to offer the particulars if anyone is interested.

I am also looking for a good antenna design for the 10 Meter band. I tried building one of those twinlead dipoles described in the Antenna Handbook; but the SWR is really high and I can't seem to figure out why. The dipole is the correct length and it resonates on the desired Freq., but the SWR remains way too high. Any ideas? Perhaps the shorting bars across the dipole elements need moving? or the capacitor in the feedline needs to be a different value? I have tested it between 26 and 32 MHZ and cant find a spot were the SWR drops to below 3:1

Robert S. Williams

From qrp-request@Think.COM Wed May 5 02:13:13 1993
From: J. Sherwood Williams <jwill@cabell.vcu.edu>
Subject: Mizuho Specification Sheet
Date: Wed, 5 May 93 2:13:03 EDT

MIZUHO HANDHELD SSB/CW QRP TRANSCEIVERS

Models of QRP Transceivers Available

MX-3.5S: 80 Meter Band 25Kc. per XTAL
MX-7S : 40 Meter Band 25Kc. per XTAL
MX-14S : 20 Meter Band 50Kc. per XTAL
MX-18S : 17 Meter Band 50Kc. per XTAL
MX-21S : 15 Meter Band 50Kc. per XTAL
MX-28S : 10 Meter Band 50Kc. per XTAL
MX-50S : 6 Meter Band 50Kc. per XTAL

Please note that each radio will take a maximum of two crystals at any one time. It is a simple task to change crystals as they just plug in the transceiver underneath the cover. (no other adjustment needed)

GENERAL SPECIFICATIONS OF TRANSCEIVERS

Construction : Metal case throughout

Frequency ranges:

MX-3.5S : 3.500-4.000 Modes LSB/CW
MX-7S : 7.000-7.300 Modes LSB/CW
MX-14S : 14.000-14.350 ModesUSB/CW
MX18S : 18.068-18.168 Modes USB/CW
MX-21S : 21.000-21.450 ModesUSB/CW
MX-28S : 28.000-28.600 Modes USB/CW
MX-50S : 50.000-52.000 Modes SSB/CW

Semiconductors:

4 ICs, 13Trs., 6FETs & 37 Diodes

Power supply voltages::

Internal 8.4-9VDC

6X AA drycells

7X Nicads.

When using drycells use
supplied dummy battery.

External 9.5VDC

Do not put 12V directly
into the rig unless using
optional DC/DC converter or
charging internal nicads

Power consumption:

RX 70mA (at no signal)

TX 620mA (maximum)

Frequency stability:

+/- 500Hz At power-up

+/-100Hz at 25 deg. C after 30 Min.

Antenna impedance : 50 Ohms

Dimensions : 2.6" x 1.5" x 5.6"

Weight (including Batt.) :

MX-3.5S 645g.

all others 590g.

TRANSMITTER SPECIFICATIONS

Maximum power output : 2 Watts

(1 watt MX-50 6 meters)

Spurious radiation: -40db

Modulation: Single sideband

(suppressed carrier)

Carrier suppression: 40db minimum

Crystal filter sideband suppression:

40 db minimum

Harmonic Levels:

Harmonic Levels

=====

2nd -63dBc

3nd -59dBc

4th -76dBc

5th <-90dBc

6th -82dBc

7th -80dBc

8th <-90dBc

9th <-90dBc

Built in microphone, LED transmit indicator and mini CW key-button on top panel

RECEIVER SPECIFICATIONS

Receiver method: Single conversion superhet

Sensitivity: S/N 15db at 0.5uV input

: Attenuator in 0.22uV

Selectivity: -6dB 2.39kHz

: -60db 4.55kHz

Blocking: Measured as increase over 12dB SINAD level of interfering signal with an unmodulated carrier, causing 6dB degradation in 12dB SINAD

on-channel signal:

Separation	Rejection
=====	
+/- 10kHz	72.5dB
+/- 100khZ	76.0dB
+/- 1Mhz	91dB
+/- 10MHz	93.5dB

IF and Image Rejection: Increase in level of signals at the first i.f. image frequency, and at the i.f. it self (11.2735), over level of on-channel signal

to give identical 12db SINAD signals:

Image	<100dB
IF	73dB

3rd Order Intermodulation Rejection: increase over 12dB SINAD level of two interfering signals giving identical 12dB SINAD on-channel 3rd order intermodulation Product, 10KHz signal spacing:

Attenuator Out	53.0dB
Attenuator In	60.5dB

Intermediate frequency: 11.2735 Mhz

RX Includes: Crystal filter, AGC, noise blanker, built in S-meter

LOCAL OSCILLATOR

Oscillation method: Variable crystal

CRYSTAL SPECIFICATIONS

For HX-28S:

 Fundamental mode

 60 pF internal capacitance

 0.0010 % tolerance

 HC-25 case

CONTROLS

Top panel: Rit. , AF volume, Tuning, Noise blanker, Crystal switch,
S-meter

 External Speaker and Microphone jack, mini CW key-button, BNC
antenna jack

Bottom panel: Power supply in, Charging switch, RF Attenuator, SSB/CW
mode switch, Jack for external key.

Optional Mizuho Accessories

Telescopic whip antennas, CW side-tone unit, 10 Watt linear
amplifier,

AC power supply, DC-DC converter, Carrying case, speaker mike, Mobile rack

So, I hope that answers any questions you may have about the rigs. In general, I am quite happy with mine. I just wish band conditions were better on the 10 Meter band these days. I can't afford the other band models. ;->

From qrp-request@Think.COM Thu Apr 29 16:56:35 1993
Date: Thu, 29 Apr 93 15:56:21 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: MXM Rig

Gang,

Jeff, AC4HF, i think i have the call right. asked about the new MXM rig, so in order to save time i'll give you a quick update and then a final review when i get it assembled.

first: it's a transceiver, single band
second: board is 4 1/2" x 3 5/8" (11.2cm x 9.2cm)
third: uses the superRX receiver and transmitter from WA6IVC (Bruce)

nice board with silkscreen. it's not green, but it goes inside a case anyway. ;-)

the kit is not out yet, but will be shortly. i'll let you know.
Bruce will be showing the rig at the Hamcom fest in June here in dallas area.

the rig is vfo controlled, thus eliminating the previous problem of being crystal controlled. will work the whole band. can be set up for 80, 40, 30, and 20 meters. don't know if other bands are gonna be available for any time soon.

kit doesn't come with cabinet and additional hardware (key jacks, power plug, etc.). this may be a turnoff for some people but not for the real hackers. :-)

i'll shoot for getting it built this weekend or middle of next week.

output transistor is 2SC799 and should be capable of 5 watts out.
may run hot, but hey, silicon doesn't melt until the temp gets real

high.....

72 de k5fo chuck dit dit

p.s. rig to sell for \$99.50 or so. definitely the hottest receiver around.
500 Hz bandwidth with possibility of going down to 200 Hz bandwidth,
but you'll probably get some 'ringing' at 200 to 100 Hz. uses Cohn
filter in the IF.

more details to follow.

ciao,

chuck

From qrp-request@Think.COM Wed May 5 10:28:27 1993
From: jpo@acd4.acd.com (Jim Osburn)
Subject: My VFO
Date: Wed, 5 May 93 8:23:59 EST

I have finished my 40 M VFO and it works.
Perhaps it would be helpful if I listed some of the dumb things I did
while building it.

1. I soldered the 2N3904 transistors in backwards. I was looking at the wrong base diagram. Next time I will make sure.
2. I used copper clad perf board and a pad cutter tool. The circuit looks neat but it took too long to cut the pads. Next time I will try a variation of ugly construction that uses copper clad perf board.
3. I had to fiddle with the disk capacitors around the air variable more than I expected. Of course I didn't have the air variable specified (who does) and I had to fiddle with the circuit to get what I wanted. I didn't calculate what I needed, I just did cut and try. Next time I will calculate.
4. I removed a 4.7 k resistor from the circuit that seemed to not make it work and I don't understand the reason the resistor is there. The circuit I used was the VFO from the Optimized QRP rig in the 1992 Handbook. There is a 4.7 k resistor in the circuit from the secondary of T1 back to the VFO buffer. When I looked at the waveform of the VFO on my scope it looked bad. I suspected the resistor and when I

cut it out of the circuit, the waveform was good. I don't know why the resistor is there but the circuit seems to work better without it. So, I've left it out.

Anyway the VFO works. Now I'm going to build a receiver. There's probably lots of ways to mess up a receiver too.

72,

Jim, WD9EYB

From qrp-request@Think.COM Wed May 5 14:41:55 1993
Date: Wed, 5 May 93 13:58:29 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: My VFO

>
>4. I removed a 4.7 k resistor from the circuit that seemed to not make
>it work and I don't understand the reason the resistor is there.
>The circuit I used was the VFO from the Optimized QRP rig in the 1992
>Handbook. There is a 4.7 k resistor in the circuit from the secondary
>of T1 back to the VFO buffer. When I looked at the waveform of the
>VFO on my scope it looked bad. I suspected the resistor and when I
>cut it out of the circuit, the waveform was good. I don't know why
>the resistor is there but the circuit seems to work better without it.
>So, I've left it out.
>
>72,
>
>Jim, WD9EYB
>

Yes, this has been an error in the ARRL handbook on-going for several years now.

Great detective work on your part Jim.

73's

Ed W1AAZ

From qrp-request@Think.COM Fri May 7 11:20:41 1993
Date: Fri, 07 May 93 14:44:48 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: NE QRP Spring Daze #1

Up here in New England, we've been fooling around with rigs

that use color-burst crystals (3579.545 kHz). In keeping with the G-QRP tradition of giving every piece of equipment a name, I call these rigs 79ers.

If you live in a densely populated area, you need a lot of patience, as the TVs are everywhere. Doesn't anyone read anymore? With deft usage of series inductance, you can "bend" these crystals a few kHz, and avoid most of the TVs.

NE QRP had it's first May Daze 3579 QSO Party last night, from 9 to 10 PM EDT (0100-0200 GMT). W1AW operates CW on 3581 kHz, so we had to clear out before they got started at 0200. The span of frequencies I observed last night was 3579.3 - 3581.3

I use indoor wire antennas. I know I can do better on 80, but haven't taken the time to try anything except some loops of wire. I don't know how many stations were on last night, but I worked everyone I heard except KN1H: W1FMR, NN1G (also in Newington), VE2DRB, WA1JXR, WT1M (whodat?).

About 0140 I went down to 30 meters for a while, but I only worked a couple of 4s. Guess I missed the Internet crowd. (I was watching "The Real West" on TV...) Let's see some activity reports from those of you who made it!

72,

Jim, KR1S

--

jkearman@arrl.org

From qrp-request@Think.COM Mon May 3 01:45:57 1993
Date: Sun, 2 May 93 22:44:42 PDT
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: Need Copies of Articles

I am in desperate need of copies of 2 articles. I bought circuit boards at Dayton thinking that I had the magazines at home, but was not able to find them on my return. Here is what I need. I need the CMOS Keyer article that was in January 92 of Radio Fun, and I need the 20 Meter NE602 Based Transceiver article that was in January 89 Ham radio. If you can help me out, I would appreciate it. 73, Doug, KI6DS. Home address 862 Frank Ave., Dos Palos, CA 93620. Thanks for your help.

From qrp-request@Think.COM Mon May 3 18:16:55 1993
Date: Mon, 3 May 93 15:15:28 PDT

From: dh@altair.csustan.edu (Doug Hendricks)
Subject: Need help with parts subs.

I am building an Iambic keyer from the autumn 88 issue of Sprat, #56, and I need to know US subs for the following transistors: BC214, BC183, & BCX33. Also, I am building the Sudden receiver from and I need to know a source for the Toko coils part # 3333, 3334, 3335, & kxnk 4173A0. I would appreciate any help that you can give. I don't have the article from 73 about the sudden, perhaps if you do you could look it up for me. Tnx, Doug, KI6DS.....72

From qrp-request@Think.COM Wed May 5 13:49:31 1993
Date: Wed, 5 May 1993 12:49:18 -0500 (CDT)
From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>
Subject: net sked

>Well group,
>
>people seem to like 30 meters... how does 10.120 at 01:00
>UTC sound? We could start any night (how about thursday may
>6th to see how it goes).

Sounds good to me. But one question, motivated by long experience of missing schedules: Do you mean Thursday, May 6 to be a local or a UTC date? That is, will it be tonight or tomorrow night in North America?

>
>We could do the same thing on different evenings on 40 m. if
>people only had access to that band..

THAT ought to motivate me to find out what's actually wrong with the 40m LO in my old HW-8. It wasn't the crystal, as I thought at first.

>
>I agree 30 is pretty good.
>
>Put in your votes now.. or just show up and call/answer
>/USE.
>
>73
>
>Jeff, AC4HF

Cheers & 73! Jim K5YUT

From qrp-request@Think.COM Wed May 5 16:32:49 1993
Date: Wed, 5 May 1993 12:49:18 -0500 (CDT)
From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>

Subject: net sked

>Well group,

>

>people seem to like 30 meters... how does 10.120 at 01:00

>UTC sound? We could start any night (how about thursday may

>6th to see how it goes).

Sounds good to me. But one question, motivated by long experience of missing schedules: Do you mean Thursday, May 6 to be a local or a UTC date? That is, will it be tonight or tomorrow night in North America?

>

>We could do the same thing on different evenings on 40 m. if

>people only had access to that band..

THAT ought to motivate me to find out what's actually wrong with the 40m LO in my old HW-8. It wasn't the crystal, as I thought at first.

>

>I agree 30 is pretty good.

>

>Put in your votes now.. or just show up and call/answer

>/USE.

>

>73

>

>Jeff, AC4HF

Cheers & 73! Jim K5YUT

From qrp-request@Think.COM Wed May 5 16:50:28 1993

Date: Wed, 5 May 93 15:50:14 -0500

From: adams@chuck.dallas.sgi.com (Charles Adams)

Subject: New England Dazers

Jim Kearman, ARRL HQ, announced the daze going on up there on the low bands. try that down here in May and you'll lose your ears with the QRN. ever meet anyone that worked 160 and/or 80 year round that wasn't deaf? ;-)

just a personal note: i took mxm rcvr (40 mtr) wid me to MI land last year. detroit about aug/sept timeframe. no wonder you guys up north and northeast can get DXCC QRP!!! it's just a stones throw over the pole or the pond. we oughta get a handicap factor down here in 5 land. we have all the XE ssb stations to fight with. dx was everywhere on 7000 to 7060 and we don't hear that much on the best of days down here, at least

not 579-589 consistantly.

here i am trapped between ssb and digital. down to 20 KHz to work in and getting smaller every day..... ;-)

72 de k5fo (i ain't gonna move anyway) :-)

DXCC QRP 4 worked/4 confirmed 40 CW

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Tue May 4 09:02:01 1993
Date: 04 May 1993 08:01:49 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: news group

Hi,

I agree with Clark.. I think low power people are special and this is a chance to get to know each other a little better.

I really look forward to USE QSO parties and such. I tried to get on the air and catch Chuck Adams last night, but unfortunately we had a tornado watch and very severe thunderstorms and such.. I decided to wait for another day (although I admitt I did have the rig on for a little while till the lightning was right overhead).

I think that the photo album is a great idea.. neat to see what some of the other weird QRPers look like.. I think Chuck is looking for a few more projects..HI HI

73

Jeff,AC4HF

From qrp-request@Think.COM Tue May 4 08:48:25 1993
Date: Tue, 4 May 1993 7:48:01 -0500 (CDT)
From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>
Subject: newsgroup?

>On 3 May 1993, Daniel W. Collison wrote:

>
>> unsubscribe
>>
>> Too much mail; maybe would be better as a usenet newsgroup. Thanks.
>>
>> --dwc
>> Daniel.W.Collison@dartmouth.edu
>
>yes I agree how about changing to a newsgroup so people
>can select topics of their interest!
>bob KA6NOC .. struggling to get to 20WPM!!!

I certainly don't mind initiating a news group, but don't feel overwhelmed with mail from this alias, either. If I want to review subject lines and read selectively a quick "dir" followed by a judicious "del" does the trick. (Of course I don't have to pay for disk space, either!)

72!?! What a good idea.

Jim K5YUT

From qrp-request@Think.COM Mon May 3 22:06:02 1993
Subject: Re: Newsgroup?
Date: Mon, 03 May 1993 19:02:16 -0700
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

If there is an informal discussion or vote going on, I prefer to leave the QRP mailing list just like it is. I am not in favor of a newsgroup because of the threat of a higher signal/noise ratio. I am very content with the volume and the personal nature of our list.

Clark

.....

Clark Savage Turner, Graduate Student Researcher
Safety Critical Software Group home:
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717 Irvine, CA. 92715
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526, active on HF, VHF and UHF.
Admitted to practice law in California, Massachusetts, and New York.
ARRL Volunteer Counsel

From qrp-request@Think.COM Tue May 4 11:34:32 1993

Date: Tue, 4 May 1993 08:37:41 -0800
From: burdick@interval.com (Wayne Burdick)
Subject: Re: newsgroup?

Personally, I like the content and volume of mail I get from this list. I know alot more about QRP and QRPers as a result.

Perhaps *copying* this mail to a newsgroup would satisfy the needs of those who choose not to subscribe to the mailing list.

Wayne, N6KR

Wayne Burdick
wayne@interval.com
(415) 354-0928

Interval Research Corp.
1801-C Page Mill Road
Palo Alto, CA 94304

From qrp-request@Think.COM Wed May 5 23:59:27 1993
Date: Wed, 5 May 93 20:58:14 PDT
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: Northern California QRP Club

Jim, WA6GER and I are hard core QRP nuts, and we have been meeting at the Livermore, California swap for a couple of years. In fact, we even went to Dayton this year to meet the QRP Gurus there. While at Dayton, one of the forums was forming local QRP clubs, and it really inspired the two of us.

We have been kicking around the idea of starting an informal QRP club

(read that no boring business meetings),

that would meet at Livermore at 10:30 or 11:00 AM after the swap dies down. Everyone would bring their QRP stuff for a show and tell. We will have a table at the June swap and we will be located right by the Livermore Club's booth by the concession stand. There will be several qrp rigs there plus a couple of gadgets that we have, OHR Wattmeter for one, plus we will have an operational station. You are invited to stop by and

become a charter member of the Northern California QRP Club. It will be referred to as the NorCal QRP Club. We plan on issuing numbers and having a quarterly newsletter, but we will mainly get together and show and tell QRP. Stop and see us if you are interested. 72, Doug, KI6DS

From qrp-request@Think.COM Fri May 7 12:49:23 1993
Date: Fri, 7 May 1993 12:47:17 -0400 (EDT)
From: FOXG@WCSub.CTSTATEU.EDU
Subject: Oak Hills Research

I have the 40 mtr OHR DC receiver QRP rig. I love it! It worked the first time I fired it up. OHR has been extremely helpful and gracious. Just one proviso... This is a DC receiver with all that that implies. Expect problems from high power swbc stations far off your frequency. Understand that you'll hear 2 of every signal. I've worked EU, AF and coast-to-coast with it.
73, Geoff

From qrp-request@Think.COM Thu May 6 14:15:23 1993
Date: Thu, 6 May 1993 11:44:00 +0000
From: "Michael (W.M.) Babineau" <babineau@bmr.ca>
Subject: Oak Hills Research QRP Kits

Hi :

I'm considering purchasing one of QRP Tranceiver Kits by Oak Hills Research (most likely the 30M model) and I'm interested in any comments (positive or negative) from people out there who have one of these rigs. I have talked to one local ham who has one and he seems quite satisfied with his.

Thanks in advance.

Michael, VE3WMB (HW-8, Argonaut 509 and no antennas!)

From qrp-request@Think.COM Thu May 6 14:18:27 1993
Date: Thu, 6 May 1993 11:44:00 +0000
From: "Michael (W.M.) Babineau" <babineau@bmr.ca>
Subject: Oak Hills Research QRP Kits

Hi :

I'm considering purchasing one of QRP Tranceiver Kits by Oak Hills Research (most likely the 30M model) and I'm interested in any comments (positive or negative) from people out there who have one of these rigs. I have talked to one local ham who has one and he seems quite satisfied with his.

Thanks in advance.

Michael, VE3WMB (HW-8, Argonaut 509 and no antennas!)

From qrp-request@Think.COM Thu May 6 16:05:54 1993
Date: Thu, 6 May 93 15:05:39 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Oak Hills Research QRP Kits

Gang,

i have built the following from OHR: (i'm just a crazy kit builder trying to adjust to the lack of a heath supply....)

1. the 20 mtr old qrp kit (\$149.95)
2. the OHR 40 mtr Spirit (\$198.95)
3. the OHR 30 mtr Sprint (\$109.95)
4. the OHR WM-1 wattmeter (\$79.95)
5. the OHR Audio Filter (\$69.95) not quite sure about this one

also a 20 mtr Spirit, but it's not ready yet..... ;-) thought i'd try the visible part of the spectrum above 40 meters.....

all the kits are super. the original rig, advertised by Ocean State Electronics and others, is being replaced with a new kit (soon to be announced and sold) called the Explorer.

all the kits have double sided, silk screened, green solder masked, plated through holes, etc. circuit boards. good density and compact boards. reminds of the better heath boards. parts are first rate quality.

- a. the Spirit is my favorite and my full time rig on 40 meters. of course, the antenna is most important here. i use a 80 meter long wire up 10 meters. my hit ratio is over 98%, and this is no exaggeration on my part it has very little to do with my operating skills. i mean, 2 watts is 2 watts is if i hear them, and the receiver is HOT, i can work them. i may get beat periodically by someone with more power, but hey, that's what qrp is all about. i don't mind.

anyway, i digress again. the qsk solid state switching is just beautiful. [i ran heath hw-16 (a long time ago at 25 watts) for many many years just because it was the first rig to have solid state switching, even though the rest was tubes.] everybody i talk to says the keying is super in the Spirit.

talked to a w2 in february. i started the rig cold turkey in a room where ambient temp was 60 degrees. the guy was running a kenwood that had been on for 30 minutes plus. i talked to him for an hour at 40 wpm. neither one of us touched the dial. the temp compensation in all of Dick's, KE8KL, rigs is super. he spends extra time at this. Dick bought OHR from Doug DeMaw some time back. i don't know the dates.

anyway, if you can spring the bucks, get this one. 2-5 watts out. i set mine for 2. i thought 2 would be a challenge over 5. ;-)

- b. the Sprint is a very small version of the W7EL DC rig. output is 1.5 watts. this one is going with me next week to houston for week long business trip. also taking hw-9 to play with.

the sprint is on 30 meters and it works rather well. i have some difficulty on my long wire due to rf ground, but i'm working this problem out when i can get some time to play. when at home i'd rather work 40 anyway. the rig is light, sorry i don't have the exact size and weight, but ping me and i'll measure all of the above. no ads on this rig that i've seen. maybe someone from Dayton saw one at the meet.

i had Tejas' Backpacker I and never got it to work. the OHR board is the size of one of the three boards in the Tejas. anyone gotten a Tejas rig to work? i talked to a BP II in St. Louis months ago, but the 40 beam the guy had was pointed to the east and stuck there. kinda interesting story. guy was a qrp meeting and he had handed out a copy of a newsletter that i had done to the group that he had gotten from someone i had given it to in San Antonio..... small world. BTW, that doesn't make me famous..... ;-)

- c. the wattmeter and the audio filter are great. i would not part with the wattmeter for anything other than a brandnew one. in case someone doesn't want to bother with the assembly process. no qrp shack should be without one of these critters. three scales, 10 mW, 1 W, and 10 W full scale readings. 9V powered and i've left the thing on for days at a time and still the battery is going.....

the audio filter is the best one around that i've seen. i gave my Autek QF-1A away!! the audio filter is based on the one in a QST article in Oct of 1992. i think that's right.... yeh, that's it.

ok, phd dissertation ended. if you want more details, send SASE,
830 Waite Drive, Copper Canyon, TX 75067-8581. i'll try to get
ASCII copy to think.com for ftp, but don't hold me to the fire on
this one guys. i'm against the wall already on my time line.

the explorer is gonna be in the \$159-169 dollar class. can't wait
to get one. be the first kid on the block to own the whole set.

i am just a peachy keen happy customer. i am not paid by OHR or
employed by them in any form or fashion.

Oak Hills Research
20879 Madison St
Big Rapids, MI 49307
Dick Witzke KE8KL (ex KD7RT)

i'd put the phone number here, but then i'd be asking for trouble. ;-)
don't want to put him in overload. it's in the mags, except QST.

72 es gl de k5fo,

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Thu May 6 15:41:02 1993
Date: Thu, 06 May 1993 12:40:57
From: hlester@as.arizona.edu (Howard Lester)
Subject: Re: Oak Hills Research QRP Kits

>Michael, VE3WMB (HW-8, Argonaut 509 and no antennas!)

No antennas? No DXCC for you!!!

:)

From qrp-request@Think.COM Fri May 7 12:00:54 1993
Date: Fri, 7 May 93 11:00:44 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: one free meal

ok gang, i promised and i'll deliver. sending AA2U a check for one free meal!!! :-)

here is the message i got from Randy, reprinted here with his permission.

neato::::

* Hello Chuck,
* I hit 300 countries over a year ago on mixed mode all band QRP.
* I confirmed 300 this Jan and received awards from the G-QRP club and
* the ARCI. Just hasn't been published yet in the QQ. I am not the first
* one to work 300 countries QRP but may be the first to do it without nets
* and lists. It will be a while before I have 300 on a single band QRP but
* my 15m worked total is over 280 now so not an impossibility.
* I have all my QSL's and log info on DXCC band country counters
* entered into DBASE IV now. Almost up to 1600 band countries confirmed
* QRP not counting 6m which would be another 50 or so more. There are at
* least 100-150 outstanding QSL's. I am not sure of the exact count.
* Other 300 country QRP achievers that I know about are KR2Q(also no
* nets), possibly N4KG and WG5G. K300 is well on his way with only 2 watts
* and may have surpassed 300 by now.
* I hope to surpass 300 on both SSB and CW but it will take some
* more time to achieve that.
* 72,
* Randy Rand AA2U
* rrand@PICA.ARMY.MIL

thanks for the feedback Randy. that's why we created this group - to exchange hints and kinks. we're outnumbered and outpowered but we ain't outsmarted.

QRPers do it with little ones!!!!

72 es gl es bcnu de k5fo

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Mon May 3 17:48:06 1993
Date: Mon, 3 May 93 16:47:52 -0500

From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: oops

oops, k6zh pointed out the error of my ways... make that 0300-0400 UCT.

to err is human.....

dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Tue Apr 27 09:20:28 1993
Date: Tue, 27 Apr 93 07:20:18 MDT
From: datwyler@moons.sim.es.com (Doug Datwyler)
Subject: periodicals for QRP

Some of us are not as active as others in QRP. Could some good QRP'r
kindly post to the list (may be of interest to all) a list of
periodicals dealing with QRP.

TNX,
Doug WR70
datwyler@moons.sim.es.com

From qrp-request@Think.COM Mon May 3 16:39:36 1993
Date: Mon, 3 May 93 15:39:22 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: photo album

Gang,

send me a photo of you and/or your rig. preference is to
have photo of you operating at your rig. i'll collect them
all and make an album to send to everyone that contributes
a photo.

no guarantees on how well i can do this, but i'll do my best.

chuck adams
830 waite drive

copper canyon, texas 75067-8581

BTW - there is no copper (except what i personally buried) and there is
no canyon where i live. ;-)

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Tue Apr 27 00:48:35 1993
From: andrews@fmsysm.ncoast.org (Andrew Sargent N80FS)
Subject: please put me back on the mailing list, please...
Date: Tue, 27 Apr 1993 00:26:05 -0400 (EDT)

OK, I'm on my hands and knees, please (somebody) please put me back on
the qrp mailing list. I missed the 6M thread I started...

andrews@fmsysm.ncoast.org

--

..
..
..

From qrp-request@Think.COM Tue Apr 27 19:08:06 1993
Date: Tue, 27 Apr 93 16:06:45 PDT
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: Please subscribe me to your news service. dh@csustan.edu

From qrp-request@Think.COM Tue Apr 27 01:30:13 1993
Date: Tue, 27 Apr 93 00:29:55 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: QQ April 1993 Volume XXXI nr 2

just got the quarterly today.

there are no contest results at all anywhere for the qso party.
looks like there will be a significant change in the board of directors
and officers of the club. Paula, WB9TBU, will not be running for
re-election for president and Luke, W5HKA, also is not running for

re-election as secretary-treasurer. three directors terms will expire at the end of the year.

New World Miles-Per-Watt Record with the Fireball: 2.133 billion.

Bob, K7IRK, and Bill, WB8ELK, from Palestine, TX to Hancock, NH, using 0.72 microwatts for a distance of 1,536 miles 1/19/92 at 2133UTC on ten meters.

for those of you who might not know, the Fireball is a kit sold by Smith Enterprises in CA for \$26 including shipping. uses a computer oscillator, max of 50 milliwatts (DigiKey CTX128 or X131) on 28.322 or 28.060 MHz. just key the B+ at 5 volts to 6 volts max. feed output to antenna via 0.01 microfarad cap. hope you got some filtering in the tuner!!! ;-) K7IRK, designer of the circuit has worked WAS with 2 milliwatts.

that's it from here.

de k5fo chuck CP-60 dit dit

From qrp-request@Think.COM Fri May 7 13:54:30 1993
Subject: re: QRP calling freq
Date: Fri, 07 May 93 10:54:19 -0700
From: Jeff McLeman <mcleman@nthead.zso.dec.com>

>>Finally it seems that the Novice/Tech subbands (except the 10m subband)
>>should be a good place for QRP (though underused) because the QRO guys
>>have to throttle back power to 200W PEP or less? Why don't QRPers make
>>more use of this? You may even infect a Novice/Tech operator with the QRP bug.

Actually, Kevin, I do this. I like running QRP in the 15 meter and the 80 meter novice sub-bands. They get a kick out of my power output. I use an old 6L6 tube xmitter. Can't wait to get one of those next solid state rigs to go camping with.

72,

jeff KD1IT/7

From qrp-request@Think.COM Fri May 7 12:06:52 1993
Date: Fri, 7 May 93 11:06:44 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: QRP calling freqs

here is the list, as i have it for the internationally recognized
QRP calling freqs +/- QRM.....

BAND	CW	SSB
160M	1.810MHz	1.910MHz
	1.843MHz (Europe)	
80	3.560	3.985
	3.710 (US Novice)	don't forget about these guys. i can do 5wpm.
40	7.040	7.285
	7.030<-->7.060 (Europe)	
	7.110 (US Novice)	
30	10.106	no/no ; -)
20	14.060	14.285
15	21.060	21.385
	21.110 (US Novice)	
10	28.060	28.885
	28.110	28.385 (Novice CW)
6	50.060	50.885 (this may be 50.300 now because of R/C airplanes)
2	144.060	144.285

let me know if i screwed this up, and i'm sure you will. ; -)

dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Fri May 7 13:11:22 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Fri, 7 May 93 10:09:39 PDT
Subject: RE: QRP calling freqs

Hmmm, I was looking through my QRP books yesterday to check on these figures, but you saved me the effort of typing them in (great minds think alike, uh, Chuck :-)

One thing that struck me is that EVERYONE omits 17m band from these lists. Is this because it was the last WARC band opened up to US hams? Are there any recognised CW and SSB QRP frequencies on 17m -- or do we just use the whole band :-)

I also note that there is a move afoot to move the 10 SSB QRP frequency

down to 28.360 at least in Europe (the most recent SPRAT mentioned it).
It seems sensible as there is a lot of activity in the 28300 to 28500
Novice/Tech subband.

Finally it seems that the Novice/Tech subbands (except the 10m subband)
should be a good place for QRP (though underused) because the QRO guys
have to throttle back power to 200W PEP or less? Why don't QRPers make
more use of this? You may even infect a Novice/Tech operator with the QRP bug.

72

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears
to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From qrp-request@Think.COM Fri May 7 13:21:45 1993
Date: Fri, 7 May 93 12:21:34 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: QRP calling freqs 12 and 17M

Dr. Martin Zurn, HB9/DL1GBZ es IK2RMZ, pointed out that i omitted
12 and 17 meters. sorry, but the list i had didn't have those.

Dr. Zurn gave 18.096 for 17m and 24.906 Mhz for 12m as calling freqs
from Benelux QRP Club newsletter.

add these critters to the list i previously sent out.

viel danke Doktor Zurn, auf wiedersehen und guten tag,

dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Fri May 7 15:56:59 1993
Date: Fri, 07 May 1993 12:57:01
From: hlester@as.arizona.edu (Howard Lester)

Subject: Re: QRP calling freqs 12 and 17M

>Dr. Zurn gave 18.096 for 17m and 24.906 Mhz for 12m as calling freqs
>from Benelux QRP Club newsletter.

Stay clear of 18.096 when W1AW is transmitting!

From qrp-request@Think.COM Mon May 3 09:16:23 1993
Date: Mon, 03 May 93 12:47:30 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: QRP Clubs

Folks, we need a QRP Club FAQ, and I hereby volunteer!

I know there are many small, regional QRP clubs. Please send me whatever info you have on them (St Louis, Northwest, etc). I have QRP-ARCI, MI-QRP, G-QRP, OK-QRP and NE-QRP info. I need UA-QRP info, and any other clubs outside the US that you know of. I'll compile the list and post it to the group monthly or so.

Email to jkearman@arrl.org

BTW, OK1CZ is now scheduled to arrive here Tuesday, May 4. He called me from Philadelphia Friday night (was supposed to be HERE Friday. He and his wife, Blanco, are flying from Phila to Boston (!!!!!) tomorrow, and will arrive here whenever.

I'm not even going to mention the lack of activity up here Sunday.... :+>

72,

Jim, KR1S

From qrp-request@Think.COM Fri May 7 11:28:22 1993
Date: Fri, 7 May 93 08:27:06 PDT
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: QRP Icom 735

This week someone asked how to turn a 735 down to qrp levels. Last night I

did the agc trick that was in QRP Quarterly, July 89, page 8. It was written by Mike Michaels, w3ts. All the circuit has in it is a battery connector for a 9 volt battery, a 10k resistor, 68k resistor, 10k pot, switch and a 1x2x3 minibox. Took about 5 minutes to build, and worked great. I hooked it up to my Icom 735, tuned it up, and turned it on. I was able to adjust the power from 2 milliwatts to 5 watts. I then called a group of guys on 75 meters. They gave me a signal report of 57 and then would not believe me when I told them how much power. Measured it on Oak Hills Research WM-1 Wattmeter. So, I turned up the power from 20 milliwatts to 5 watts. They could see a difference! One guy still would not believe me so I went to 100 watts (sorry guys, but I was proving a point). He believed me finally. This mod works great, is easy, cheap, and even I got it right the first time. If you need the circuit and don't have a copy, drop me an email message and I will send you a copy. 72, Doug, KI6DS

From bruce@Think.COM Thu May 6 22:50:53 1993
From: Bruce Walker <bruce@Think.COM>
Date: Thu, 6 May 93 22:50:52 EDT
Subject: QRP list QSO party

I made a pretty brief appearance on 10.120 tonight, long enough to work Jeff AC4HF and Clark WA3JPG. Conditions around 10.120 were pretty brutal up here, with a broadband rhythmic noisemaker at 10.121. A few kHz lower would have been clear. I QSYed down to the QRP-NE party on 3.579 and worked a couple of other list members (Jims KR1S and W1FMR) as well as a few Internet-impaired QRP NE folk. Nice to hear those I heard, and I'd love to hear of others among us who managed to QSO.

--bruce WT1M

From qrp-request@Think.COM Fri May 7 08:36:47 1993
From: mvjfm@mvubr.att.com
Date: Fri, 7 May 93 08:20 EDT
Subject: Re: QRP list QSO party

Bruce Walker

Nice talking to you last night on the "May Daze Sprint", (QRP-NE Thurs. eve QSO party).

I used the Argosy at first, but the guys were having so much fun running xtal control, I fired up my "Colorburst" special. Put a 150 pf variable cap in series with the xtal, (using Radio Shack clipleads), and got about 7 khz of freq. shift.

What a blast !

Worked KN1H, WT1M, VE3DRB, NN1G, WA1JXR, KR1S, and a few others.

My output was 1 watt to a 140' wire, an ultra simple HB tuner, about 150' of various length ground wires (3) laying on the grass.

Hearing the gang and working them all was a gas !!!!

More fun than I have had in a long time;
Especially from a little HB square of parts hooked to a gell cell and key.

Only one (1) switch was used.

The antenna was switched from tx to rx.
The Argosy was used as the rcvr, and the AGC circuit in the Argosy took care of the audio level perfectly.

Simple and very efficient.....

Looking forward to QSOing you next Thursday, and seeing you with the QRP-NE group this weekend at the Rochester NH Hamswap. QRP-NE Club meeting just after the drawing (if they have one) on Sat. ~ 1:30 pm.

Jim, W1FMR

From qrp-request@Think.COM Wed May 5 15:19:03 1993
Date: Wed, 05 May 93 19:08:13 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: QRP New England Spring Daze

The QRP-NE May Daze sprint from 9-10 pm EDT,
on ~ 3.579 Mhz, each Thursday evening in May.

Although it didnt get into 72,
use RSTX(579X) "X" if you are xtal control.

QSOs are cumulative.
ie.... Can work the same station on subsequent Thursdays.

Warning.....
W1AW comes on at 10:00 pm. (3581 kHz)

Logs/comments/gripes to

Jim Kearman, KR1S
83 Main Street Apt 13C
Newington, CT 06111
or email

72,

Jim

--

jkearman@arrl.org

From qrp-request@Think.COM Sat May 1 10:37:55 1993
From: mulvey@world.std.com (Richard K Mulvey)
Subject: QRP Quarterly
Date: Sat, 1 May 1993 10:37:48 -0400 (EDT)

Hello!

I've seen the magazine "QRP Quarterly" mentioned here a few times, and would like to get a subscription. Can anyone tell me the phone #/address of the publisher?

Thanks!

- Rich

--

Rich Mulvey	mulvey@world.std.com	"A thing of beauty is a joy forever:
{&&, }	73476.1142@compuserve.com	its loveliness increases; it will
Katy Mulvey	(The new Mrs Mulvey! :-)	pass into nothingness..."

From qrp-request@Think.COM Mon May 3 18:13:01 1993
Date: Mon, 3 May 93 18:12:50 -0400
From: jrj@mbunix.mitre.org (James R. Johns)
Subject: QRP Quarterly Index 1985-1992

I'm posting this index for Doug KI6DS who wants to make it available to the QRP group on the Internet. Doug can be reached at:
dh@deneb.csustan.edu

All the standard disclaimers apply. I have no financial interest in this list nor the back issues that Doug is making available.

(I understand that the back issues are made available at cost)

Doug is looking for the following issues of the QQ: October 87, January 88 and April 88. If you have any extra copies of these issues of QQ

contact Doug at the address above.

73 & 72

Jim KA0IQT
jrjohns@mitre.org

Preface: This index was done by KI6DS, Doug, who makes it available to all QRPers. Hopefully you will find it useful and handy as I have. I suggest that you put it in your word processor and use the search feature to find keywords. The categories are rather broad, but necessarily so. I will do updates each year and make them available. If you would like to have reprints of back issues, I have them available for \$10 per year, plus \$3 postage per order. I have the years 1985 - 1992. If you order all 8 years, there is a special price of \$73. Each year is bound in 1 book, so please do not ask for individual issues, i.e. April 88, as I cannot make them available that way. Please feel free to distribute this to anyone as long as it is not used in any way to make money.

My address is: Doug Hendricks
KI6DS
862 Frank Ave.
Dos Palos, CA 93620
209-392-3522

Best 72, Doug

Index to "QRP Quarterly 1985 - 1992"

ANTENNAS

A Day for Milliwatts and New Antennas, Brice Anderson, April 86, p.6
Antenna Experimenters' Exchange, Jim Stevens, KK7C, April 86, p. 15
A Tri-Band Loop, Brice Anderson, W9PNE, April 89, p. 19
Broadband 75/80 Meter 2 Wire Dipole, Frank Lamb, K4ADI, April 85, p. 13
Butternut Vertical Antenna Notes, Roger, KB4GBS, April 92, p. 23
California QNI Special, Fred Turpin, K6MDJ, April 86, p. 11
Cut QRN with KG5F's RX Loop, Mike Michael W3TS, July 87, p. 20
DX-ing With a Half Sloper Antenna, Brice Anderson, W9PNE, January 87, p. 29
DX-ing With Loop Antennas, Jay Sturdivant, KV7X, July 88, p. 7
Endfed Wire Portable Antenna, John Collins, KN1H, April 89, p. 14
Even More on Zepp Antennas, C.F. Rockey, W9SCH, July 92, p. 6
Fall Antenna Ideas, Paul Schaffenberg, KB8N/7J6CAM, October 88, p. 12
Field Day Rhombic, Jim Stevens, KK7C, April 85, p. 10
Go Fly a Kite (to support an antenna), Don Shipman, W3RDF, October 88, p. 15
Grounded Half Delta Loop, Mike Michael, W3TS, April 85, p. 7
Half Sloper for 80 and 160 Meters, Brice Anderson, W9PNE, January 87, p. 30
Invisible Antennas, George Hermann, N9BNH, April 86, p. 13
Lazy Quagi for Armchair Copy, Sandy Sanderson, W0TID, April 86, p. 10
More on Zepp Antennas, Jay Coote, WB6AAM, April 92, p. 9
Multi-band Short Vertical Dipoles, John Stanford, NN0F, April 91, p. 27

Multi-band Trap Dipole, Ed Popp, K5BOT, April 85, p. 16
 Notes on the Delta Loop Antenna, Jim Fitton, W1FMR, April 88, p. 17
 On Two-Element Beam Antennas, Bob Brown, NM7M, April 88, p. 18
 Optimized Four-Element Yagi, Brice Anderson, W9PNE, April 88, p. 16
 QRP and DB Equals DX (Delta Beam Antenna), Norm Fleming, W8PT, July 87, p. 9
 Quadruple Your Signal With an X-beam Antenna, Brice Anderson, W9PNE, July 87, p. 7
 Reader Feedback on Dipoles Fed with Tuned Lines, Reply #1, Jerry Bartachek, KD0CA, October 92, p. 14
 Reader Feedback on Dipoles Fed with Tuned Lines, Reply #2, Jay Jeffery, WV8R, October 92, p. 14
 Reader Feedback on Dipoles Fed with Tuned Lines, Reply #3, C.F. Rockey, W9SCH, October 92, p. 15
 Secrets of the Six-Shooter, Bob Brown, NM7M, April 86, p. 9
 Simple, Efficient Folded Antennas, Paul Schaffenberger, 7J6CAM, July 87, p. 11
 Skelton Cone Antenna, By the Staff and others, April 85, p. 17
 Skelton Cone Antenna, Fred Turpin, K6MDJ, January 86, p. 14
 Some Good Antennas for Automatic Tuners, Jay Coote, WB8AAM, October 92, p. 8
 The Bazooka Antenna, Hans Tschamer, HB9XY, April 89, p. 21
 The Camptenna, Bill Wawrzeniak, W1KKF, January 89, p. 6
 The Care and Feeding of Open Wire Lines, Dave Benson, NN1G, July 90, p. 6
 The Case for the End-Fed Half-Wave, Denton Bramwell, K7OWJ, April 89, p. 9
 The KISS Antenna, Fred Bonavita, W5QJM, October 89, p. 7
 The Rockloop, C.F. Rockey, W9SCH, July 91, p. 18
 The Windom Antenna, Dave Benson, NN1G, October 89, p. 8
 This Sloper Needs No Tuner, Jerry Bartachek, KD0CA, April 85, p. 12
 Venerable Zepp, C.F. Rockey, W9SCH, July/October 86, p. 19
 Visual Aids for Tuning Small Loop Antennas, Jack Hines, K4GI0, October 92, p. 6
 Zapp the DX with "The Zapper", Larry Feick, NF0Z, January 90, p. 7
 "Zip Strip" for Feedlines, C.F. Rockey, W9SCH, July 85, p. 11
 2 Element Button Beam, Jim Stevens, KK7C, April 86, p. 14
 40 Meter Low Visibility Loop Antenna, Jim Fitton, W1FMR, July/October 86, p. 16
 50 Ohm Loop Antennas, Brice Anderson, W9PNE, October 91, p. 15

ACCESSORIES

A Frequency Counter for the HW-9, Paul Levesque, KB1MJ, October 91, p. 16
 A Simple Capacitance Meter, Mike Czuhajewski, WA8MCQ, October 91, p. 12
 A Stable VFO, Antoine F. Gallindo, July 90, p. 11
 A Universal Crystal Oscillator, Paul Levesque, KB1MJ, October 87, p. 6
 AI2T Memory Keyer, Barry Ives, AI2T, January 86, p. 12
 Cutting Noise In Audio Filters, Luke Dodds, W5HKA, January 89, p. 18
 Do You Trust Your RF Probe?, Mike Czuhajewski, WA8MCQ, July 90, p. 19
 Electronic T/R Switch, Dave Benson, NN1G, October 91, p. 25
 High Performance Passive Audio Filters, Ed Wetherhold, W3NQN, January 91, p. 17
 High Q Coil Set Up for Low Loss QRP Antenna Tuners, Mike Michael, W3TS, October 89, p. 13
 How Smart is your Dummy Load, Luke Dodds, W5HKA, July 89, p. 11

Identifying Unknown Crystal Filters, Mike Czuhaiewski, WA8MCQ, July 92, p. 23
 KD3S Keyer, "Simon Says: Take Two Steps Backwards", Jim Reid, KD3S, July 92, p. 9
 K3TKS Emergency Key and Crystal Adapter, Mike Czuhaiewski, WA8MCQ, July 91, p. 13
 K3TKS Meter Boxes, Mike Czuhaiewski, WA8MCQ, July 91, p. 13
 Mavti-40 Second Order MFA Bandpass Filter, Paul Kranz, W1CFI, January 85, p. 6
 Miniature Antenna Tuner for 3.5-29 MHz, Mike Michael, W3TS, April 85, p. 19
 MFJ QRP Wattmeter?, Mike Czuhaiewski, WA8MCQ, July 90, p. 18
 Notes on Designing Filters & Matching Sections, Denton Bramwell, K7OWJ, October 87, p. 5
 Old, Oddball Test Equipment Department: The Boonton 245, Mike Czuhaiewski, WA8MCQ, April 92, p. 24
 Omega Tuner, Alden Gamage, WA9QMO, April 90, p. 21
 QRP for the Yaesu 757GX and 747SX, Francis Kelson, HL9BK, October 92, p. 25
 QRP Power Control on QRO Rigs, Keith Clark, W6SIY, April 87, p. 4
 QRP Power Meter and Dummy Load, Drew Diamond, VK3XU, July 85, p. 18
 Quick and Dirty DC Receiver Audio Stage, Mike Czuhaiewski, WA8MCQ, July 89, p. 14
 Recent QRP Wattmeters, Mike Czuhaiewski, WA8MCQ, July 90, p. 19
 RF Power Meter, Luke Dodds, W5HKA, January 90, p. 16
 Rock's Test Box Does It All, C.F. Rockey, W9SCH, January 85, p. 8
 Sensitive SWR Meter, Drew Diamond, VK3XU, July 85, p. 16
 Stalking the Stable VFO (with apologies to Ewell Gibbons), Dave Benson, NN1G, July 92, p. 32
 Super Tee Antenna Tuner, D.A. Michael, W3TS, July 92, p. 12
 The Balun: Separating Fact From Fiction, Paul Schaffenberg, KB8N/7J6CAM, April 90, p. 22
 The "Chef's Secret" Antenna Relay Box, Paul Schaffenberg, KB8N/7J6CAM, July 90, p. 29
 The Q-Meter, the Homebrewer's Friend, Mike Czuhaiewski, WA8MCQ, October 91, p. 26
 The Trombone Audio Filter, Jim Reid, KD3S, July 91, p. 8
 Tune-up Bridge Fits Inside Your HW-7 or HW-8, Jerry Bartachek, KD0CA, January 88, p. 15
 Variable Crystal Oscillators, Wes Hayward W7ZOI, April 85, p. 5
 W3NQN Passive Audio Filters In The Flesh, Mike Czuhaiewski, WA8MCQ, July 91, p. 11
 W3NQN Audio Filter Items Still Available, Mike Czuhaiewski, WA8MCQ, July 92, p. 22

EQUIPMENT MODS AND REVIEWS

A&A Engineering MOuSeFET Transmitter, Tim Groat, KT0U, July 88, p. 13
 A&A Engineering's 20 Meter QRP Transceiver, Bob Cutter, K10G, July 91, p. 14
 A Dial Light for the HW-7, John Stribrny, October 92, p. 16
 Adding QRP to the TenTec Paragon, Dave Redfern, N4ELM, April 92, p. 34
 An Advocate for the Misunderstood Yaesu FT-7, Dale Hall, KB0WZ, April 92, p. 13
 Another HW-9 Key Thump Suppressor, Paul Levesque, KB1MJ, January 92, p. 20
 Another Look at the Omega Tuner, Alden Gamage, WA9QMO, October 90, p. 9
 Another 30 Meter Mod for the Hw-8, Ed Popp, K5BOT, January 85, p. 12

Argonaut II Revisited, Larry Kunk, WN9A, January 92, p. 11
Bad HW-8 Output Cores, Mike Czuahajewski, WA8MCQ, October 92, p. 17
Band Pass Tuning for the Analog Argosy, Cornell Drentea, WB3JZ0, July 89, p. 7
Better HW-9 Heatsinks, Jack Cleary, WN2Q, October 90, p. 12
Book Review: Keys, Keys, Keys, by K4TWJ, Mike Czuahajewski, WA8MCQ, April 92, p. 32
Book Review: Low Power Communications Volume 1: QRP Basics, Mike Czuahajewski, WA8MCQ, October 92, p. 32
Book Review: QRP Classics, Fred Bonavita, W5QJM, October 90, p. 17
Book Review: The ARRL Antenna Compendium, Vol. 2, Fred Bonavita, W5QJM, July 90, p. 17
Book Review: W1FB's Design Notebook, Mike Czuahajewski, WA8MCQ, April 91, p. 11
Book Review: W1FB's QRP Notebook, Mike Czuahajewski, WA8MCQ, April 92, p. 28
Century 21 Power Savings, Luke Dodds, W5HKA, July 89, p. 4
Coaxial Dynamics, Inc. QRP HF Termination Wattmeter, Mike Czuahajewski, WA8MCQ, April 92, p. 27
Computer Dupe Checking, A Review, Jim Griffin, W9NJP, April 92, p. 19
Correction to K4TWJ 30M Rig Correction & VXO Notes, Mike Czuahajewski, WA8MCQ, January 92, p. 18
Covering HW-9 Cabinet Scratches, Dick McIntyre, K4BNI, October 90, p. 13
DeMaw Kits: A Review, Fred Bonavita, W5QJM, January 88, p. 16
Dial Lights for the HW-9, John Cleary, WN2Q, July 90, p. 28
Experiences With & Modifications to the HW-9, Dick McIntyre, K4BNI, April 85, p. 14
Filter Mods for the HW-9, Cam Hartford, N6GA, July 88, p. 10
Fluke Model 77 Digital Multimeter, Mike Czuahajewski, WA8MCQ, April 89, p. 10
Frequency Counter as a Cheap "Spectrum Analyzer", Mike Michaels, W3TS, January 89, p. 17
Frequency Counter for 509/515/HW-9, Luke Dodds, W5HKA, October 91, p. 20
From Mike's Notebook: More HW-9 Mods, Mike Michael, W3TS, January 88, p. 23
Further Notes on the HW-9, Larry Wilson, KF0N, January 90, p. 8
Heath Model IM-2311 Digital Multimeter, Walter Thomas, WA4KAC, January 92, p. 9
Heath PSA-9 Power Supply Modification, Mark Miller, KD5P, July 89, p. 18
Heath HW-9 VFO Drift Cure, Larry East, W1HUE, October 89, p. 13
HW-7 Tip (check AC power supply), Mike Czuahajewski, WA8MCQ, October 88, p. 14
HW-7/8/9 Power Connectors, Mike Czuahajewski, WA8MCQ, January 89, p. 18
HW-8 Motorboating Cure Revived and Simplified, Mike Czuahajewski, WA8MCQ, July 92, p. 26
HW-9 and HFT-9 (tuner) Mods, Dick McIntyre, K4BNI, July 88, p. 27
HW-9 Drift, Dick McIntyre, K4BNI, January 89, p. 18
HW-9 Fixes, Larry East, W1HUE, July 89, p. 10
HW-9 Once More, Dick McIntyre, K4BNI, April 91, p. 10
HW-9, Once More, Once More, Dick McIntyre, K4BNI, January 92, p. 17
HW-9 Selectivity Improvement - A Parts Offer, Paul Levesque, KB1MJ, July 91, p. 8
HW-9 Update, Scott McLellan, ND3P, October 91, p. 23
Icom QRP, Mike Michael, W3TS, July 89, p. 8
Il Bombino Grande, C.F. Rockey, W9SCH, January 89, p. 17

Kanga Marker Generator Kit, Luke Dodds, W5HKA, April 91, p. 29
 LED Battery Warning Light, Don Callow, VK5AIL, October 90, p. 10
 Lil' Sucre Transmitter Note, Don Kelly, KA5UOS, April 90, p. 18
 Low Cost Coils, Mike Michael, W3TS, July 89, p. 18
 Make your ARGO into a Contest Rig, Fred Bonavita, W5QJM, April 87, p. 9
 Making a Good Rig Better - HW-9 Mods, Larry East, W1HUE, April 89, p. 14
 Making the HW-7 Into a Radio, John Collins, KN1H, October 87, p. 4
 Meters, Bridges, and a Cheapie Keyer Paddle, Bill Latta, N4LH, July 92, p. 22
 Milliwatt Calibration for the Heath HM-9, Mark Miller, K5DP, January 90, p. 16
 Modifications and Improvements to the HW-9, S.W. McLellan, ND3P, April 91, p. 4
 Modifying the MFJ-422B Keyer, Marc Ressler, K3NCO, October 91, p. 10
 Modifying the Yaesu FT747GX for QRP, Leighton Smart, GW0LBI, October 92, p. 19
 More Argonaut II Comments, Wayne McDaniel, W8WVR, April 92, p. 13
 More HW-9 Mods, Marc Ressler, K3NCO, July 90, p. 21
 More on HW-9 Drift, Charles Cole, K3VFH, April 90, p. 17
 More W3NQN Passive Audio Filters, Mike Czuhaiewski, WA8MCQ, April 91, p. 21
 Neophyte Receiver Kit (review), Dick McIntyre, K4BNI, July 88, p. 14
 OHR QRP 20 Meter Transceiver, Dave Redfern, N4ELM, July 92, p. 20
 Operating the IC-735 as a QRP Rig, Brian Kassel, W5VB0/7, July 88, p. 23
 Porta-Paddle, Rick Van Krugel, VE7FOU, October 88, p. 4
 Power Supply Conversion for Battery Keyer, Alden Gamage, WA9QM0, July 92, p. 23
 Preamplifier and Filter Mods for the HW-9, Tim Groat, KR0U, July 88, p. 11
 Publication Review: Communications Quarterly, Mike Czuhaiewski, WA8MCQ, April 92, p. 30
 QRP for the Icom 730 and Kenwood Family, Mike Czuhaiewski, WA8MCQ, April 92, p. 25
 QRP on the Icom 751A, Dave Johnson, N7ICC, January 90, p. 18
 QRP/QRO for the HW-7, Mike Czuhaiewski, WA8MCQ, July 89, p. 15
 Repairing & Restringing the Dial Mechanism of the Century 22, C.F. Rockey, W9SCH, April 92, p. 10
 Review: Heathkit HM9 QRP Wattmeter, David Blubaugh, ND1J, January 88, p. 11
 Review: TenTec Century 22, Michael Bryce, WB8VGE, January 85, p. 13
 Reviving a Dead HW-8, Mike Czuhaiewski, WA8MCQ, July 89, p. 9
 Reworking the Ramsey Rigs, Vincent Biancomano, WB2EZG, October 92, p. 30
 Simple Remedy for Drifting HW-7, Jerry Bartachek, WD0CA, July 85, p. 17
 Some Ideas for HW-9 Mods, Rod Breau, WA50IH, January 88, p. 12
 Stable VFO Improvement, Antoine Galindo, April 91, p. 26
 Stockton Directional Power Meter, Luke Dodds, W5HKA, January 92, p. 10
 Super RIT for the HW-8, Rulon VanDyke, KA7BCD, April 90, p. 5
 Switchable RF Amp for the TenTec Digital Argosy, Mike Michael, W3TS, January 88, p. 28
 Switchable RF Gain for the Analog Argosy, Dave Redfern, N4ELM, July 92, p. 10
 SX-200 Meter (Product Review), Mike Czuhaiewski, WA8MCQ, July 90, p. 26
 Tailored Dial for the Heathkit HW-9, Frank A. Allard, WB70, July 90, p. 10
 TenTec Argonaut II, Myron Cherry, WM4Z, January 92, p. 13
 TenTec Argonaut II (Model 535), Bert Matthies, DL2HCB, January 92, p. 12
 The Amidon "Tech Data Booklet", Mike Czuhaiewski, WA8MCQ, July 92, p. 19
 The Antenna Experimenter's Guide, Peter Dodd, G3LDO, July 92, p. 6

The Iambic Keyer by Kanga Products, Jerry Bland, KI5AY, April 92, p. 31
 The Joys (and a Few Agonies) of a Transceiver Kit (HW-9), John Stanford, NN0F, July 92, p. 13
 The New MFJ-9020 QRP Transceiver, John Collins, KN1H, July 92, p. 19
 TS-830 QRP, March Ressler, K3NCO, April 90, p. 19
 True RIT for the SPC W7EL Transceiver, Bill Hickox, K5BDZ, October 90, p. 4
 Two Simple Mods for Optimum Performance of the HW-9, Herb Ley, N3CDR, April 89, p. 11
 Two Speed Tuning for the HW-8, Dave Redfearn, N4ELM, October 92, p. 20
 Upgrading the Ten-Tec Argosy Revisited, Cornell Drentea, WB3JZO, January 89, p. 8
 Wattmeter Calibration, Mike Michael, W3TS, January 88, p. 29
 W7EL QRP Transceiver (The Small Parts Center Version Kit), Bill Hickox, K5BDZ, July 90, p. 4
 W7EL Transmit Voltages for Troubleshooting, Jack Frake, NG1G, October 90, p. 12
 Zero Set and WWV Mods for the HW-8, Rulon Van Dyke, KA7BCD, January 88, p. 13

FIELD DAY REPORTS

Anatomy of a Championship Field Day Effort, Steven Finch, AI0W, April 87, p. 26
 Arizona QRP Field Day Report, Mark Brown, ND7A, April 88, p. 26
 Blazing Six-Shooter Field Day Antenna, Bob Spidell, W6SKQ, April 86, p. 8
 Field Day Antenna Raising (Zuni Loop Style), Cam Hartford, N6GA, April 88, p. 13
 Field Day in Massillon, Michael Bryce, WB8VGE, April 86, p. 7
 Field Day Operation with Small Antennas, Brice Anderson, W9PNE, April 89, p. 13
 Five Years of QRP Field Day, Bob Patten, N4BP, April 87, p. 23
 Keys to a Consistent QRP Field Day Effort, Bill Stocking W0VM, April 87, p. 17
 QRP Field Day: More Fun with Less Power, Jim Stevens, KK7C, April 87, p. 31
 Strategy For Milliwatt Field Day Success, Robert (Red) Reynolds, K5VOL, April 87, p. 21
 This Won't Be Murphy's Field Day, Rulon VanDyke, KA7BCD, April 87, p. 29
 W6SKQ Field Day Operations, bob Spidell, W6SKQ, April 85, p. 8
 1986 QRP Field Day Honor Roll, Ade Weiss, W0SRP, April 87, p. 15
 1987 QRP Field Day Results, Ade Weiss, W0SRP, April 88, p. 6
 1991 Milliwatt Field Day, Red Reynolds, K5VOL, April 92, p. 20

MISCELLANEOUS

A Balun May Be Eating Your Lunch, John Collins, KN1H, April 87, p. 10
 A Funny thing Happened on the Way to Saudi Arabia, Jim White, W0NJB, July 91, p. 15
 A New Type of Air Trimmer Capacitor, Mike Czuahajewski, WA8MCQ, January 92, p. 21
 A Rare Moment with some Rare DX, Francis Merceret, WB4BBH, July 88, p. 19
 A Miles Per Watt Calculator, T.E. "Doc" Drake, W5TB, January 90, p. 20
 Alc QRP Controller Revisited, Mike Czuahajewski, WA8MCQ, July 89, p. 19
 All Time Leaders (Contests), Red Reynolds, K5VOL, January 91, p. 13
 Amateur Radio in the Year 2005, Jim Griffin, W9NJP, October 92, p. 33

An Interlude on a Mountaintop, Al Bates, W1XH, April 92, p. 9
Another Printed Circuit Board Idea, Mike Czuahajewski, WA8MCQ, January 92, p. 19
ARRL Drops Proposed Band Allocation Plan, Paula Franke, WB9TBU, July 90, p. 2
ARRL QN-Signals for CW Net Use, Staff, April 88, p. 29
Audio Muting for Transceivers, Dave Benson, NN1G, July 90, p. 20
Back Issues, Available at Last!, Mike Czuahajewski, WA8MCQ, October 92, p. 2
Bandpass Filters Using TOKO Inductors, Chip Owens, NW00, October 90, p. 19
Beware the Toothless Alligator (Leads), Mike Czuahajewski, WA8MCQ, October, 91, p. 25
Board of Director Profiles, Staff, October 90, p. 21
Building Open Wire Feeders Using a Hot Glue Gun, Paul Schaffenberg, KB8N/7J6CAM, October 88, p. 13
BY4AA and a Computing DX'er, Robert Brown, N7DGZ, July 85, p. 12
Checking Hamfest Meters, Mike Czuahajewski, WA8MCQ, January 92, p. 7
Circuit Board Tips, Mike Czuahajewski, WA8MCQ, October 90, p. 11
Cooking With Toroids, Mike Czuahajewski, WA8MCQ, July 90, p. 20
Contest Rules Fall QRP ARCI CW QSO Party, Red Reynolds, K5VOL, October 92, p. 34
Contest Rules QRP ARCI Holiday Spirits Homebrew Sprint, K5VOL, October 92, p. 35
Contest Rules QRP ARCI Winter Fireside SSB Sprint, K5VOL, October 92, p. 35
Contests: Where are all the homebrew rigs?, Red Reynolds, K5VOL, April 89, p. 23
Dallas Convention, Staff, April 89, p. 22
Dayton 1988 QRPvention, Staff, April 88, p. 4
Dayton 1988 Report - Family Reunion, Staff Photos, July 88, p. 24
Dayton 1991 Rooms, Myron Koyle, N8DHT, October 90, p. 20
Diary of a Contester, Dave Muller, KK2E, April 90, p. 13
Doctoring Japanese Planetary-Drive Vernier Dials, C.F. Rockey, W9SCH, April 89, p. 14
Down South In Dallas, Mike Kilgore, KG5F, July 89, p. 13
Easy PC boards Using Spot Weld Cutters, Paul Clark, WA1MAC, October 92, p. 4
Editor's Word, Paula Franke, WB9TBU, April 89, p. 22
Energy Nets, Jeff Wilson, SWL, January 90, p. 6
Errata-Symbols for Solar Activity Chart From Jan. Issue, Bob Brown, NM7M, April 87, p. 11
Expanded Dial Scale for VFOs, Mike Czuahajewski, WA8MCQ, October 92, p. 25
Eyeball to Eyeball at Dayton, Staff, January 87, p. 18
E2/R Explained, Mike Czuahajewski, WA8MCQ, April 89, p. 20
Fall CW QRP Contest Report, Red Reynolds, K5VOL, January 89, p. 11
Fall 1989 QSO Party, Red Reynolds, K5VOL, January 90, p. 12
Fall 1990 QRP ARCI Contest, Red Reynolds, K5VOL, April 91, p. 13
Free QSL Bureau Established, W.C. Wellborn, K4CLA, July/October 86, p. 22
From the Tech Editor, Dave Benson, NN1G, October 92, p. 3
General Contest Rules, Red Reynolds, K5VOL, April 88, p. 21
General Contest Rules, Red Reynolds, K5VOL, October 89, p. 15
General Contest Rules, Red Reynolds, K5VOL, January 91, p. 27
Great Surplus Tuning Capacitor, Mike Czuahajewski, WA8MCQ, October 92, p. 26
Grinding Surplus Crystals, Jim Fitton, W1FMR, October 87, p. 7
Ham Radio from a Condo, Robert S. Whittle, VE7DCI, July 88, p. 12
Harry Blomquist (Obituary), Staff, July 88, p. 6

Having Some Fun with an Old VFO, Paul Schaffenberg, KB8N/7J6CAM, October 88, p. 13

Hit the Jackpot on 10 Meters, Gus Taylor, G8PG, April 87, p. 13

Homebrewer's Net, Mike Czuhaiewski, WA8MCQ, January 90, p. 16

Hoot Owl Sprint Results, Red Reynolds, K5VOL, October 89, p. 14

How to Make Contests Fun for Everyone, Jim Griffin, W9NJP, April 92, p. 18

Hydro Power, Jeff Wilson, SWL, January 90, p. 6

IF Transformers, Chris Hethorn, KM8X, January 90, p. 18

Inductors Made Easy, Mike Michaels, W3TS, January 86, p. 19

Inexpensive Alternative to FT37-43 Toroids, Mike Czuhaiewski, WA8MCQ, October 90, p. 11

Insulator for Capacitor Shafts, Dick McIntyre, K4BNI, October 91, p. 26

Introducing the Newest QRP ARCI Directors, Staff, January 92, p. 30

Japanese Transistors for QRP, Mike Czuhaiewski, WA8MCQ, July 92, p. 26

Japanese Transistor Chart: Shoot the Typesetter, Mike Czuhaiewski, WA8MCQ, October 92, p. 22

Joe's Quickie #2, Joe Everhart, N2CX, April 91, p. 22

Joe's Quickie #3, Joe Everhart, N2CX, July 91, p. 11

Joe's Quickie #4, Joe Everhart, N2CX, July 92, p. 24

Joe's Quickie #5, Joe Everhart, N2CX, October 92, p. 22

Lead Acid Battery Caution, Mike Czuhaiewski, WA8MCQ, April 89, p. 14

League Threatens 40 Meter QRP Frequency, T.A. Verachtert, WD9IWP, April 90, p. 4

Let's Hear it for QRP (4 page flyer for spreading the QRP word), April 86 centerfold

Letters to the Editor, Staff, April 92, p. 35

Letters to the Editor, Staff, July 92, p. 29

Letters to the Editor, Staff, October 92, p. 12

Listing of QRP/Homebrew Resources, Danny Gingell, K3TKS, October 92, p. 29

Logger: QRP ARCI Contest Logging and Dupe Checker Program, Bruce Milne, WB2QAP, April 91, p. 30

Low Cost Equipment Cabinets, Mike Michael, W3TS, July 88, p. 26

Lower Limits of QRP and LERP, Bryce Anderson, W9PNE, January 87, p. 14

Members' News, Richard Fisher, KI6SN, April 92, p. 36

Members' News, Richard Fisher, KI6SN, July 92, p. 36

Members' News, Richard Fisher, KI6SN, October 92, p. 36

Membership Survey Resusts, Fred Bonavita, W5QJM, April 86, p. 18

Microwatting, Wes Hayward, W7ZOI, July 85, p. 4

Milliwatting and Microwatting (An alternative method for the 1990's), Christopher J. Page, G4BUE, January 89, p. 7

Milliwatting Experiences and Comments, Lee Andreas, N9BDL, April 92, p. 24

Mobile CW - QRP Style, Dave Little, AF5U, April 89, p. 7

More QRP Show and Tells, Mike Czuhaiewski, WA8MCQ, January 91, p. 7

Mosfets Discontinued, Mike Czuhaiewski, WA8MCQ, January 92, p. 19

My Three Year DXpedition to Okinawa, Paul Schaffenberg, KB8N/7J6CAM, July 88, p. 20

Naany Almost Got My Goat, Mary Lou Brown, NM7N, October 87, p. 22

National SPAM Frequencies, Charles F. Wooten, Jr., KD4XX, January 90, p. 19

Net Activity Report, Danny Gingell, K3TKS, April 89, p. 26

Net News, Danny Gingell, K3TKS, October 89, p. 21
New England QRP, Staff, April 92, p. 2
New Technical Editor for the Quarterly: NN1G Takes Over, Mike Czuhajewski, WA8MCQ, July 92, p. 21
News from the Hospitality Suite...(and a New QRP Certificate), George Domer, W9ZSJ, January 89, p. 10
Noise Bridge for Antenna Measurements: An Introduction, Keith Clark, W6SIY, July 87, p. 4
Not Enough QRP Equipment Available?, Jay Coote, WB6AAM, April 92, p. 14
Notes on Stabilizing VFOs, Denton Bramwell, K7OWJ, January 90, p. 18
One Stop QRP Parts Store, Mike Michael, W3TS, July 88, p. 26
Open Letter to Ham Radio Magazine, Mike Czuhajewski, WA8MCQ, July 90, p. 25
Operating QRP in Contests, Jim Kearman, KR1S, April 92, p. 16
President's Message, Paula Franke, WB9TBU, July 90, p. 24
President's Message, Paula Franke, WB9TBU, October 92, p. 3
Q Meter Update, Mike Czuhajewski, WA8MCQ, April 92, p. 23
QRP AM Milestone, David Olsen, W6PSS, January 90, p. 19
QRP and Amateur Radio Satellites, Part 1, Mike Herr, WA6ARA, April 92, p. 4
QRP and Amateur Radio Satellites, Part 2, Mike Herr, WA6ARA, July 92, p. 7
QRP - Apocalyptic Proportions, Rev. Nicholas Parker, VE7NJP, July 90, p. 27
QRP ARCI Awards Summary, Bob Gaye, K2LGJ, January 91, p. 9
QRP ARCI Awards Summary, Bob Gaye, K2LGJ, January 92, p. 29
QRP ARCI Awards Summary, Bob Gaye, K2LGJ, April 92, p. 38
QRP ARCI Awards Summary - January-March, Bob Gaye, K2LGJ, July 92, p. 28
QRP ARCI Awards Summary - Second Quarter 1992, Bob Gaye, K2LGJ, July 92, p. 28
QRP ARCI Contest Log, Staff, April 86, p. iii
QRP ARCI Contest Summary Sheet, Staff, October 89, p. 17
QRP ARCI History, Purpose and Policies:, Staff, October 92, p. 21
QRP ARCI News, Staff, October 89, p. 2
QRP ARCI Spring QSO Party Results, Red Reynolds, K5VOL, July 89, p. 16
QRP ARCI 1992 Net Schedule, Danny Gingell, K3TKS, July 92, p. 39
QRP BBS?, Mike Czuhajewski, WA8MCQ, April 90, p. 17
QRP Candy Store, Bob Spidell, W6SKQ, July 87, p. 23
QRP Classics in 1992 ARRL Handbook, Mike Czuhajewski, WA8MCQ, January 92, p. 17
QRP Constructors Net, Mike Michael, W3TS, July 88, p. 26
QRP Contesting Software, Peter Beedlow, NN9K, April 91, p. 20
QRP DX Chasing, Keith Clark, W6SIY, July/October 86, p. 20
QRP DXing from a Desert Isle, Bob Brown, MN7M, April 87, p. 14
QRP In Dayton, John Solony, WA3SRE, July 89, p. 12
QRP Hamvention, Les Shattuck, WB2IPX, July/October 86, p. 5
QRP Means Quick Reduce Power, Norm Fleming, W8PJ, January 87, p. 7
QRP Notebook (A book review), Jack Russell, K2RS, July/October 86, p. 19
QRP Quarterly Abbreviations List, Staff, January 86, p. iii
QRP Quarterly 1991 Index, Staff, January 92, p. 31
QRP QSL's Name Badges, Staff, July 90, p. 25
QRP - "Quit Running Power", Richard W. Hayman, K3DML
QRP RTTY, Jerry Bartachek, KD0CA, October 91, p. 31
QRP Show and Tell, Mike Czuhajewski, WA8MCQ, April 89, p. 16

QRP Stereo, Jim Fitton, W1FMR, October 92, p. 23
QRP Transistor Stock List, Gene Smith, KA5NLY, October 88, p. 8
QRP VHF Contesting in the Field, Peter Breedlow, NN9K, April 90, p. 14
QRPing Through Oceana, Herbert "Pete" Hoover III, W6ZH, April 89, p. 8
Quick and Dirty Crystal Filter Test, Mike Czuahajewski, WA8MCQ, April 90, p. 17
Quickie Audio Oscillator, Joe Everhart, N2CX, January 91, p. 16
Radio Shack 2N3053's are Ok Again, Mike Czuahajewski, WA8MCQ, July 92, p. 22
Re W3TS Stepped Inductor, Mike Michael, W3TS, January 90, p. 16
Reflections on Milliwatt Contesting, Bricy Anderson, W9PNE, April 86, p. 6
Reluctant Pioneers of QRP, Norman Field, G4LQF, January 88, p. 4
Results: Classic QRP Sprint-1989, Buck Switzer, N8CQA, October 89, p. 16
Results: Classic Sprint 1991, Buck Switzer, N8CQA, July 91, p. 23
Results of the 1991 Fall QRP ARCI QSO Party, Red Reynolds, K5VOL, January 92, p. 23
RF Wattmeter Calibration for Poor Folks, C.F. Rockey, W9SCH, April 91, p. 24
Rules: Europe For QRP Weekend 1992 (From G8PG), Staff, April 92, p. 18
Rules: Russian QRP Contest, Staff, April 92, p. 19
Simple Mods Improve Operating Convenience, Luke Dodds, W5HKA, July 88, p. 26
Single Hole BNC Socket Mounting, Mike Czuahajewski, WA8MCQ, January 92, p. 20
Slip Dial Face, Bob Vitullo, K9TWK, April 91, p. 23
Slug-tuned Inductors as an Alternative to Toroids, chip Owens, NW00, July 90, p. 8
Source of Crystals, Mike Czuahajewski, WA8MCQ, January 90, p. 16
South Carolina QRPers Go To Dayton, Gary Foster, WD80XE, October 90, p. 18
SPC QRP Kits and Parts Available from Oak Hills Research, Mike Czuahajewski, WA8MCQ, April 91, p. 21
Speaker Connectors, Bob Vitullo, K9TWK, April 91, p. 23
Spirit of QRP in the History of Amateur Radio, Chris Hethorn, KM8X, October 87, p. 14
Subscription Info on Quarterly Labels, Mike Kilgore, KG5F, July 91, p. 2
Suggestions for Portable Equipment Cases, Mike Michael, W3TS, July 88, p. 26
Summer Daze Contest Report, Red Reynolds, K5VOL, January 89, p. 11
Taking a Peek into GQRP Stations, Luke Dodds, W5HKA, January 91, p. 22
Telling the World About QRP, Joe Sullivan, WA2WW, January 87, p. 21
The Antenna Stringing Expedition, Jim Griffin, W9NJP, April 91, p. 18
The ARCI meets the G-QRP, Paula Franke, WB9TBU, January 91, p. 4
The Chicken Bander, Robert Slack, W9DLN, April 90, p. 20
The Demise of WA8MCQ/DU3, Mike Czuahajewski, WA8MCQ, October 91, p. 24
The DX Hunter, Jim Griffin, W9NJP, October 91, p. 9
The Future of QRP, Paul Schaffenberg, KB8N, April 92, p. 12
The Huff 'n Puff Power Supply or Solar Power is for Wimps, Jim Reid, KD3S, July 91, p. 9
The KP2 QRP DXpedition, Paula Franke, WB9TBU, and Larry Maso, N4UB, January 89, p. 21
The Latest WA5JAY Mini-Rig, Mike Czuahajewski, WA8MCQ, July 91, p. 10
The Notorious HW-8 Subgroup, Hilliard Goldman, KY0U, July 90, p. 22
The Quarterly's 1989 Index of Articles, Staff, January 90, p. 23
The Quarterly's 1990 Index of Articles, Staff, January 91, p. 21

The President's Mailbox: Argonaut 2 Problems, Paula Franke, WB9TBU, October 91, p. 2
 The Somewhat Less Than 500 Pound Canary, Brian D. Kassel, W5VB0, October 91, p. 22
 To Russia With Love, Bob Brown, NM7M, July 88, p. 22
 Toroid Cookery, Chip Owens, NW00, January 91, p. 16
 Toroid Inductance Charts, Mike Czuahajewski, WA8MCQ, October 92, p. 9
 Treasures in Tube Technology, Paul Schaffenberger, 7J6CAM/KB8N, January 90, p. 22
 TTL Oscillator QRP on 80 Meters, Dave Redfearn, N4ELM, October 92, p. 23
 TVI Reduction ?Circuit and Discussion, Dave Benson, NN1G, October 90, p. 13
 Update on the "Miles-Per-Watt" Computer Program, Larry East, W1HUE, July 90, p. 7
 VFO Capacitors, Mike Czuahajewski, WA8MCQ, July 89, p. 18
 WA8MCQ Wattmeter Calibration Notes, Mike Czuahajewski, WA8MCQ, April 91, p. 24
 What If...? (Design an Olympic Sport for QRP Radio), Paula Franke, WB9TBU, April 88, p. 5
 What's a COG Capacitor, Mike Czuahajewski, WA8MCQ, October 91, p. 25
 What's a Watt?, C.F. "Rock" Rockey, W9SCH, July 88, p. 20
 Who's Code?, Louis Varney, G5RV, July 90, p. 30
 Wire Length for Toroids, Mike Czuahajewski, WA8MCQ/3, July 88, p. 27
 1N914 vs. 1N4007 as "Cheap Pin Diodes", Mike Michael, W3TS, October 88, p. 12
 10 Meter Beacons, Joe Gumino, K20LG, October 89, p. 19
 10 Meter Beacons, Joe Gumino, K20LG, October 90, p. 22
 160 Meter Milliwatt Experiment, Leighton Smart, GW0LBI, July 92, p. 8
 160 Meters - QRP's Bermuda Triangle?, Dave Benson, NN1G, April 92, p. 33
 1988 Index to The Quarterly, Chuck Dobbins, KA5PVB, January 89, p. 23
 1988 Holiday Spirits Sprint Report, Red Reynolds, K5VOL, April 89, p. 23
 1989 Holiday Spirits Homebrew Sprint Report, Red Reynolds, K5VOL, April 90, p. 10
 1989 Winter Fireside SSB Sprint Report, Red Reynolds, K5VOL, April 89, p. 25
 1990 Dayton Hamvention, Paula Franke, WB9TBU, July 90, p. 12
 1990 Holiday Spirits Homebrew Sprint, Red Reynolds, K5VOL, April 91, p. 13
 1990 Hootowl Sprint, Red Reynolds, K5VOL, October 90, p. 15
 1990 Spring QSO Party Results, Red Reynolds, K5VOL, July 90, p. 14
 1990 Summer Homebrew Sprint Report, Red Reynolds, K5VOL, October 90, p. 15
 1990 Winter Fireside Sprint Report, Red Reynolds, K5VOL, April 90, p. 12
 1991 Holiday Spirits Sprint Report, Red Reynolds, K5VOL, April 92, p. 20
 1991 Hoot Owl Sprint Report, Red Reynolds, K5VOL, October 91, p. 29
 1991 QRP Nets Roll Call, Danny Gingell, K3TKS, July 92, p. 34
 1991 Spring QRP ARCI QSO Party Results, Red Reynolds, K5VOL, July 91, p. 19
 1991 Summer Homebrew Sprint Report, Red Reynolds, K5VOL, October 91, p. 30
 1992 Winter Fireside Sprint Report, Red Reynolds, K5VOL, April 92, p. 22
 6 Meter QRP Phone Contest Frequency or "You Just Don't Understand", Tom Pusateri, W9N BG, April 92, p. 15
 90 Degree Shaft Drive for Turns Counters, Bill Hickox, K5BDZ, October 92, p. 24

POWER SOURCES

Basics of Photovoltaic Conversion, Michael Bryce, WB8VGE, July 85, p. 14
Batteries Need T.L.C., Phil Chapman, W6HCS, July 85, p. 8
Battery Topper, Michael Bryce, WB8VGE, January 86, p. 8
Gell Cell Care, Don Rotolo, N2IRZ, April 92, p. 8
Lightning Power, Al Bates, W1XH, April 89, p. 30
Natural Power Information is Available, Staff, July 85, p. 19
Practical Solar Power for the Ham Shack Part 1, Mike Kilgore, KG5F, April 92, p. 6
Practical Solar Power for the Ham Shack Part 2, Mike Kilgore, KG5F, July 92, p. 4
Solar Powered, Michael Bryce, WB8VGE, July/October 86, p. 11
Suitcase Solar Powered QRP Station, Jim Doyle, W3CKU, July 85, p. 6

PROPAGATION

Anatomy of a DXCC/QRP, Bob Brown, MN7M, July 87, p. 13
Computer Programs for Use in Propagation Predicting, Bob Brown, NM7M, January 88, p. 8
Fabulous Propagation for Cycle 22, Bob Brown, NM7M, October 88, p. 9
Ionospheric Modes for Propagation, Bob Brown, NM7M, January 87, p. 16
In the Other Guys Shoes, Bob Brown, NM7M, July/October 86, p. 13
Propagation and DX, Bob Brown, NM7M, January 86, p. 11
Propagation and DX, Bob Brown, NM7M, January 89, p. 19
Propagation and DX, Bob Brown, NM7M, April 89, p. 12
Propagation and DX, Bob Brown, NM7M, October 89, p. 9
Propagation and DX (Grayline), Bob Brown, MN7M, October 87, p. 8
Propagation and DX (How to get up-to-date information), Bob Brown, NM7M, April 88, p. 11
Propagation and WWV, Bob Brown, NM7M, January 86, p. 11
Propagation Programs for the PC, Bob Brown, NM7M, July 88, p. 8
QRP DX Beacons on 20 Meters, Bert Mathies, DL2HCB, July/October 86, p. 22
Solar Activity: Gearing Up for Cycle #22, Robert Brown, NM7M, January 87, p. 5
Solar Minimums to Solar Maximums, Bob Brown, NM7M, April 87, p. 12
The April QSO Party, Joe QRP and the Woodpecker, Bob Brown, NM7M, April 87, p. 33
You and the Propagation, Bob Brown, NM7M, April 86, p. 19
10 Meter Beacons, Joe Gumino, K2OLG, January 88, p. 23

RECEIVERS

High Performance DC Receivers, Denton Bramwell, K8OWJ, July/October 86, p. 6
Listening On 30 Meters the Easy Way, A.F. Galindo, AC6G, April 89, p. 29
Micro Miniature "Neophyte" Receiver Board, Mike Czuhajewski, WA8MCQ, July 90, p. 18

Special Purpose Receiver, Wes Hayward, W7ZOI, January 85, p. 4
Tango Trap for 15 Meter Direct Conversion Receivers, Mike Michael, W3TS, January 88, p. 29
The L'il Sucre, Donald Kelly, KA5UOS, April 89, p. 4
Toward a Simple Superhet Receiver, Wes Hayward, W7ZOI, January 86, p. 6

TRANSMITTERS

A DSB/CW Transmitter for 80 Meters, Drew Diamond, VK3XU, October 87, p. 10
A Two-Band Two-fer with Reduced Harmonic Emission, Herb Ley, N3CDR, July 92, p. 14
All Band VXO Transmitter, John Collins, KN1H, January 92, p. 4
Build A Tuber to Warm the Cold Winter Nights, Bob Brown, NM7M, January 87, p. 13
Build Your Own Fireball Transmitter, Mike Czuahajewski, WA8MCQ, April 91, p. 26
Classic QRP, Mike Czuahajewski, WA8MCQ, July 89, p. 6
KN1H 30 Meter Bilateral Transverter, John Collins, KN1H, October 85, p. 11
Milliwatt QRP Transmitter Using Digital IC's, Paul Levesque, KB1MJ, July 88, p. 4
Modifying the Quick & Easy 10 MHz Transmitter, Fred Bonavita, W5QJM, July 85, p. 17
Mousefet Transmitters, Mike Masterson, KA2HZA, October 87, p. 15
One-Tube 40 Meter Milliwatter, John Devon, KI6DQ, October 90 p. 8
Reprint of a Quick and Easy Transmitter Schematic, Staff, January 85, p. 19
The DB25 QRP Challenge, Mike Czuahajewski, WA8MCQ, April 90, p. 7
The Lil' Sucre Transmitter, Donald Kelly, KA5UOS, October 89, p. 4
The QRP Key (with a surprise inside!), Mike Czuahajewski, WA8MCQ, January 91, p. 19
The QRP Key (with a surprise inside!), Mike Czuahajewski, WA8MCQ, July 91, p. 16
The Tiny Weekender, Mike Czuahajewski, WA8MCQ, October 91, p. 7
Universal Crystal Oscillator, Paul Levesque, KB1MJ, January 88, p. 7
VK3XU's Two-Band, Two Watt TX, Drew Diamond, VK3XU, April 86, p. 4

TRANSCEIVERS

A QSK Direct Conversion Transceiver for 80 Meters, Dave Benson, NN1G, October 91, p. 4
Build the Twofer, John Collins, KN1H, July/October 86, p. 4
Building the Optimized QRP Transceiver, Bill Wawrzeniak, W1KKF, January 89, p. 4
Cardbox 40 Meter Trans-receiver, Steven Morris, N5JBB, April 88, p. 22
DB-25 Project, H.F. Bower Version, Hal Bower, WA5JAY, April 90, p. 8
DSB Transceiver, P. David Ingalls, KD7SE, July 91, p. 4
Flip-top HW-8, Luke Dodds, W5HKA, October 88, p. 14
Get On 160 with a Transverter, John Collins, KN1H, January 87, p. 4
Matvi-40 Revisited, Paul Kranz, W1CFI, July 87, p. 16

One Transistor CW Transceiver, Mark Boucher, WB3ELL, January 90, p. 4
One Watt - 15 Meter Transceiver Packed to Go, C.F. Rockey, W9SCH, April 87,
p. 7
One Watt - 15 Meter Transceiver Packed to Go (Improvements), Mike Michael,
W3TS, July 87, p. 20
Optimized QRP Transceiver Updated, Roy Lewallen, W7EL, July 87, p. 14
Revisiting the Homebrew Classics, Fred Bonavita, W5QJM, July 87, p. 14
The Two-fer Revisited, Byron Weaver, WU2J, July 92, p. 16
The WHD-40 (40 Meter Transceiver), Michael Bryce, WB8VGE, January 87, p. 10
Updating the Compact 20 Meter CW Transceiver, Rick Littlefield, K1BQT, April
88, p. 7
W3TS "L'il Tuff Stuff" (40 Meter Transceiver), D. A. Michael, W3TS, October, 85,
p. 6

From qrp-request@Think.COM Wed May 5 12:50:36 1993
Date: Wed, 5 May 1993 12:46:27 -0400 (EDT)
From: Robert Marlan <rsm@world.std.com>
Subject: QRP rigs

Looking for a used qrp rig
would love to get my hands on a hot little hw-9 or 8
or an tentec 515. Dont care about phone just cw < 5 watts
where can I get info on thenew 'spirit' rig
please let me know what you all are willing to part with...

p.s. I called heath and...no more hw-9's ;(
(i figured it was worth a call to have one last chance
to assemble a heathkit... I will miss them)
bob KA6NOC/1 ...struggling to get to 20 wpm

From qrp-request@Think.COM Thu May 6 14:36:50 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Thu, 6 May 93 11:35:09 PDT
Subject: QRP SSB

Any advice on operating QRP SSB? Techniques and tricks?

Anyone tried QRP SSB on 40m with any success during the day or night?

Does anyone observe the QRP SSB frequencies?

Comments welcome. No flames about CW please (this is not

rec.radio.amateru.misc!)

72

Kevin Purcell N7WIM / G8UDP

a-kevinp@microsoft.com

"So much is happening in the world of electronics, but it appears to me that we QRPers are twenty years behind in the analog age."

-- QRP Quarterly Editorial, April 1993

From qrp-request@Think.COM Thu May 6 16:19:19 1993

Date: Thu, 6 May 93 16:10:55 EDT

From: "Henry T. Rand Jr." (FSAC-AAD) <rrand@PICA.ARMY.MIL>

Subject: QRP SSB

SSB and QRP even with milliwatt power do mix. I have worked alot of DX on SSB with QRP. There are many DX countries which are mostly or solely active on SSB. By operating CW only one either has to wait a long time for someone to activate the country on CW or miss out on working it alltogether. To a true CW only op, missing it probably won't matter but if one wants to maximize their country count some SSB operation is a requirement. A few ideas on QRP SSB:

Optimize your audio - pick a microphone, try more than one, and run on the air tests with someone nearby you to determine which suits your voice best.

If at all possible use speech processing. RF processing is best. Again, adjust it and check your signal quality with others on a quiet band. The higher average power from processing is only an advantage if the signal remains clear and intelligible.

These comments are geared to DXing on SSB, general ragchewing would probably not require so much effort. Just finding a clear spot on the band would be important.

As for 40m SSB from the East Coast, Europe can be easily worked on contest weekends late at night after the activity diminishes. The broadcast QRM makes contacts hard at times but the contacts can be made.

72,

Randy Rand

rrand@PICA.ARMY.MIL

From qrp-request@Think.COM Thu May 6 16:19:20 1993

Date: Thu, 6 May 93 16:10:55 EDT

From: "Henry T. Rand Jr." (FSAC-AAD) <rrand@PICA.ARMY.MIL>

Subject: QRP SSB

SSB and QRP even with milliwatt power do mix. I have worked alot of DX on SSB with QRP. There are many DX countries which are mostly or solely active on SSB. By operating CW only one either has to wait a long time for someone to activate the country on CW or miss out on working it alltogether. To a

true CW only op, missing it probably won't matter but if one wants to maximize their country count some SSB operation is a requirement. A few ideas on QRP SSB:

Optimize your audio - pick a microphone, try more than one, and run on the air tests with someone nearby you to determine which suits your voice best.

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These comments are geared to DXing on SSB, general ragchewing would probably not require so much effort. Just finding a clear spot on the band would be important.

As for 40m SSB from the East Coast, Europe can be easily worked on contest weekends late at night after the activity diminishes. The broadcast QRM makes contacts hard at times but the contacts can be made.

72,
Randy Rand
rrand@PICA.ARMY.MIL

From qrp-request@Think.COM Thu May 6 15:48:46 1993
Date: Thu, 06 May 1993 12:48:47
From: hlester@as.arizona.edu (Howard Lester)
Subject: Re: QRP SSB

>Any advice on operating QRP SSB? Techniques and tricks?
- asks Sir Kevin of Purcell....

My favorite was when I broke in with a comment to a Hawaii net with the power turned down all the way on the IC 735 - by mistake! They actually heard me. So, I think you can use QRP on SSB as easily(?) as you can on CW.

I think there ARE some designated SSB frequencies; I'll have to check the ARRL Operating Manual.

Howard

From qrp-request@Think.COM Thu May 6 16:18:10 1993
Subject: Re: QRP SSB
Date: Thu, 06 May 1993 13:11:57 -0700
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

Hello Kevin:

I am an almost exclusively 40 meter SSB QRP guy here. Have been for

over a year. My equipment has been an Argonaut 509 and a Swan MB-40 there. I occasionally use a TS-440 or TS-530 QRP also (when I NEED filters!) My antennas are wires: a 100 foot dipole running north-south and a 150 foot dipole running east-west. I am a half mile from a salt water marsh and have a good ground under me.

I have had tremendous success. I could list all the fun stuff, but would probably bore everyone. Suffice it to say that on the WAS-nets like OMISS and 3905 CC and HHH, it was a cinch to WAS in a couple of months. When they are listening for you, they hear you everytime! Similarly, though, freewheeling works just fine too! I have even checked into the West Coast Swap Net with W6DFG....if you've done heard this net you know that this is an accomplishment. Clarence even got mad at me for repeating my words.

I have also worked some Aussies, some New Zealanders and plenty of South America on 40 SSB at night. Really, it is astonishing, until you figure the science of it all. If you have a pretty good antenna and location, you might score "S9" somewhere far away with 100 watts output. Well, with 5 watts output, you don't lost too much (well, summer noise makes it pretty bad at times.) But you will come within "S7" or so.....with 5 watts. NOW, suppost you actually take care to optimize your antennas, tuner, feedline....and you use a carefully chosen mike and maybe even a reasonable speech processor. You can narrow the gap considerably.

I am sure that, with a little effort (and maybe split operation), DXCC would not be impossible at all. Some work, for sure, but when the Aussies roll in and you get a "5x5" report and chew the fat for almost an hour, you figure you can do it. Just a matter of catching the ionosphere at the right times!

The techniques are probably well known, maybe even simplistic, but here is what I do:

1. Anal retentive antenna work, choice of low loss line, etc.
2. Anal retentive tuner, cable work.
3. Struggle for the best ground possible.
4. Compare mikes and choose the one that gets through. Pick up a speech processor that does not sound too harsh but keeps that wattmeter needle pointing to "5". :-)
5. Just call as though you were a normal powered station (QR0) and do not make a deal of being QRP, unless it is pileup situation and it might be helpful. I find that if I keep a low profile, the effect is much greater when the guy asks me what I am running. This is AFTER we have already exchanged "5x6" reports both ways.....I seem to get more respect this way. When mobile QRP, I will often make a statement about being QRP because I suspect I am usually way down, and I want them

to listen. It works.

I do not personally look to the QRP SSB frequencies because I have heard no activity there. I hang around down 7200-7240 in the evening. I have found a smattering of other QRP folks down there, and am about halfway to QRP/QRP SSB WAS on 40.

Anyway, I will keep this short, but I can go on forever. Really. I love 40 meter QRP SSB!

Clark

.....

Clark Savage Turner, Graduate Student Researcher
Safety Critical Software Group home:
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717 Irvine, CA. 92715
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526, active on HF, VHF and UHF.

Your QRP Attorney!

Admitted to practice law in California, Massachusetts, and New York.

ARRL Volunteer Counsel

From qrp-request@Think.COM Thu May 6 17:08:24 1993
Date: Thu, 6 May 93 16:22:33 EDT
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: QRP SSB

Kevin

I built a 20M SSB transceiver that runs about 1 watt out. As you you know I'm 99% building, 1% operating, but I have great success with this unit. I just find a strong signal and call the station when they finish the QS0. Get about 90% hit ratio using this method. Answering CQ's with 1 watt on 20M got me a 50% hit rate. Calling CQ was a waste of time. Signal reports tended to be S7 to S9 and antenna is a 68' end fed wire (w/i 200' of ocean). Found the 20M SSB QRP frequency not active with QRP ops.

73's

Ed

From qrp-request@Think.COM Fri May 7 10:18:28 1993
From: g-taylor4@tamu.edu
Date: 7 May 93 09:17:42 CDT
Subject: Re: QRP SSB

> Any advice on operating QRP SSB? Techniques and tricks?

> Anyone tried QRP SSB on 40m with any success during the day or night?

It can be done, I've got almost a DXCC on SSB with just a G5RV at 25 ft - it ain't as easy as CW, hitting "dead-air" with your call is absolutely essential, else they aren't even going to know someone is there.

Techniques - use the qrp designator, why they can hear that and not the call I don't know but its got me a lot of contacts phone and cw..it might be timing but I do believe "qrp" gets their interest more than one just one more callsign that happens to be very weak.

- operate where the pileup isn't. Although this may contradict the usual principle of transmitting where the dx is listening, finding an opening in a large ssb pileup is difficult to the point of impossibility, if you are going to be vainly shouting into a microphone anyway might as well do it where the frequency is clear and who knows ... maybe the dx will tune there.

- Up to individual discretion but one way to get an open spot is to make a call when the dx asks for dx or is going by call areas and doesn't get a response..listen first of course...there are those that maintain a qrp station is not going to stomp anyone and this is not an unreasonable edge.

- And since I'm dealing with controversial issues there are always nets.

72, Greg, KD4HZ

Dr. Gregory S. Taylor !MAIL: 110 Dairy Science Building
Extension Program Leader for ! College Station, TX 77843-2124
Community Development !VOICE: 409-845-4445
Texas Agricultural Extension Service!FAX: 409-847-8744
Texas A&M University System !EMAIL: Reply or g-taylor4@tamu.edu

From qrp-request@Think.COM Fri May 7 10:50:59 1993
Date: Fri, 7 May 1993 10:52:08 -0400
From: reisert@mast.enet.dec.com (Jim Reisert AD1C)
Subject: RE: ORP SSB

-----Reply to mail dated 7-MAY-1993 10:40:25.50-----

```
>Techniques - use the qrp designator, why they can hear that and not the
>call I don't know but its got me a lot of contacts phone and cw..it might
>be timing but I do believe "qrp" gets their interest more than one just
>one more callsign that happens to be very weak.
```

Sorry - I have to disagree. Signing QRP instead of your call is tantamount to "last two letters", a horrible practice among good DXers. Signing QRP after your call just makes your callsign longer, and the DX station will usually pick up someone with a shorter callsign first.

>- Up to individual discretion but one way to get an open spot is to make a >call when the dx asks for dx or is going by call areas and doesn't get a >response...listen first of course...there are those that maintain a qrp >station is not going to stomp anyone and this is not an unreasonable edge.

If I were the DX station I'd ignore "out of turn" callers. Everyone else should do the same. Once you let one station through, bedlam usually results.

Better suggestions:

1. Work DX on the less popular bands, like the WARC bands. There's less competition.
2. Use the highest band when it's open. 5W on 10 meters is plenty loud, 5W on 75 meters is tantamount to suicide
3. Tune around *a lot* to find the DX before everyone else does. Otherwise, you'll have to wait until the pileup dies down.
4. Know when DXpeditions are coming, their band plans, and how long they plan to stay. I worked AH3C/KH5J on Jarvis in 1989 after they had run out of stations to work in the last days of the DXpedition.
5. Don't tail-end unless you *KNOW* the DX station is taking tail-enders.
6. Operate DX contests. Lots of good DX is begging by Sunday afternoon.

73 - Jim AD1C (DXCC QRP 140 confirmed, DXCC Honor Roll [high power])

--

James J. Reisert	Internet: reisert@mast.enet.dec.com
Digital Equipment Corp.	UUCP: ...decwrl!mast.enet.dec.com!reisert
146 Main Street - ML03-6/C9	Voice: 508-493-5747
Maynard, MA 01754	FAX: 508-493-0395

From qrp-request@Think.COM Wed Apr 28 16:43:34 1993
Date: Wed, 28 Apr 93 16:43:25 EST
From: jennings@abb.com
Subject: QRP xcvr question

Hello QRPers,

Since I'll be going to the Rochester, NY Hamfest in May, I will be on the look out for a qrp cw rig. I was wondering if the converted SSB cb xcvrs are any good for cw and if so what's a good price?

Thanks and 73

Tom Jennings KV2X
jennings@abb.com

From qrp-request@Think.COM Wed Apr 28 17:53:26 1993
Date: Wed, 28 Apr 93 17:52:41 EST
From: Brad Staff <B.Staff@mi04p.zds.com>
Subject: QRP xcvr question

Does anyone sell small, simple QRP *SSB* transceivers (assembled / kits / plans)? When conditions are good, and a 100W signal is S9+20dB, 5W doesn't seem like much of a handicap! :-)

Regards,

```
+=====+
| Brad Staff                               616-982-5791 (tel)      |
| Zenith Data Systems                     616-982-5997 (fax)      |
| Hilltop Road                           b.staff@zds.com         |
| St. Joseph, MI 49085                   aa8if                 |
+=====+
```

From qrp-request@Think.COM Wed Apr 28 20:23:35 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Wed, 28 Apr 93 17:22:41 PDT
Subject: RE: QRP xcvr question

In the UK there is a design/kit from the White Rose ARC which was originall published in RadComm. I think its a single band phasing SSB TX RX, based around a series of plug in boards. More current British hams may be able to supply details of this rig. I note that mods and add ons appeared for it in a recent SPRAT.

There is also the Rn and Tn series of receivers and transeiver designed by Rick Cambell KK7B have been appearing over the last year in QST. A down side though I have heard of people having problems getting the kits or pcbs out of him :-(These are excellent designs -- see June 1992 and March and April 1993.

Kevin Purcell N7WIM / G8UDP

a-kevinp@microsoft.com

"We conjure the spirits of the computer with our spells"

From: Brad Staff <netmail!B.Staff@mi04p.zds.com>

To: <qrp@Think.COM>

Subject: QRP xcvr question

Date: Wednesday, April 28, 1993 5:52PM

Does anyone sell small, simple QRP *SSB* transceivers (assembled / kits / plans)? When conditions are good, and a 100W signal is S9+20dB, 5W doesn't seem like much of a handicap! :-)

Regards,

```
+=====+
| Brad Staff                               616-982-5791 (tel)      |
| Zenith Data Systems                     616-982-5997 (fax)      |
| Hilltop Road                           b.staff@zds.com         |
| St. Joseph, MI 49085                   aa8if                 |
+=====+
```

From qrp-request@Think.COM Wed Apr 28 20:41:15 1993

Subject: Re: QRP xcvr question

Date: Wed, 28 Apr 1993 17:32:57 -0700

From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

Hello Brad:

You mention the desire for a SSB QRP transceiver kit....and you echo the desires of many (but not enough to move the "free market"?) I would welcome a kit like this, and I have heard some discuss that MFJ plans such a kit (?), but do not know for sure. There is a 20 meter SSB transceiver in the Handbook, but it does not look like a beginner's project (though I haven't tried building one, so I do not know for sure!)

As far as 5 watts of SSB, I work SSB QRP more regularly than I do CW. I do most of my work on 40 meters, and have had tremendous success during good conditions. I can even go mobile QRP SSB (ham stick antenna) and be heard a lot of the time. You are exactly correct, during good conditions, 5 watts is just great.....and less power can still do the job! I have been called a "liar" on more than one occasion during a ragchew on 40 m SSB because I was consistently above "S9". It's a double edged insult! God bless my little Argonaut, it has given me a lot of interesting times.

72

Clark

.....

Clark Savage Turner, Graduate Student Researcher
Safety Critical Software Group home:
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717 Irvine, CA. 92715
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526, active on HF, VHF and UHF.
Admitted to practice law in California, Massachusetts, and New York.
ARRL Volunteer Counsel

From qrp-request@Think.COM Wed Apr 28 21:01:39 1993
Date: Wed, 28 Apr 93 18:01:35 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: RE: QRP xcvr question

Kevin Purcell writes:
}In the UK there is a design/kit from the White Rose ARC which was ...

"White Rose"??? Was that named after the group in Germany that
opposed the Nazis? (BTW: There is an interesting movie called
"The White Rose" about them that is available on cassette).

From qrp-request@Think.COM Wed May 5 09:59:46 1993
Date: 05 May 1993 08:59:33 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: QSO group

Well group,

people seem to like 30 meters... how does 10.120 at 01:00
UTC sound? We could start any night (how about thursday may
6th to see how it goes).

We could do the same thing on different evenings on 40 m. if
people only had access to that band..

I agree 30 is pretty good.

Put in your votes now.. or just show up and call/answer
/USE.

73

Jeff, AC4HF

From qrp-request@Think.COM Wed May 5 17:55:11 1993
Date: 05 May 1993 16:54:39 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: QSO Sked

OK,

I admitt I always mess up with dates and UTC... My logs are all messed up when it comes to the date in the evenings.

What I had meant to say Is Thursday May 6th ...
(which would be Fri. May 7th with the UTC).

sorry

73

Jeff,AC4HF

From qrp-request@Think.COM Fri Apr 30 09:46:06 1993
Date: Fri, 30 Apr 93 13:33:31 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Real QRPer

Rod Newkirk tells a story of a ham who finished slipping together his postwar (WW2) rig, ran outside near midnight, uncoiling an RF choke for antenna wire as he went, and tossed the choke form into a tree to get height for the end fed wire. It wasn't until he awoke after sleeping off his bunch of Boiled Owl QSOs that he discovered that he'd missed the tree.

--

jkearman@arrl.org

From qrp-request@Think.COM Wed Apr 28 15:24:24 1993
From: jpo@acd4.acd.com (Jim Osburn)
Subject: Real QRPers
Date: Wed, 28 Apr 93 0:06:07 EST

I soldered the transistors in the 40 M VFO I'm building in backwards.
I claim that makes me a real QRPer.
You're not a real QRPer until you mess up as badly as I have.

73,

Jim, WD9EYB

From qrp-request@Think.COM Wed Apr 28 16:15:41 1993
Date: Wed, 28 Apr 1993 13:18:51 -0800
From: burdick@interval.com (Wayne Burdick)
Subject: Re: Real QRPers

Jim, WD9EYB, wrote:

>I soldered the transistors in the 40 M VFO I'm building in backwards.
>I claim that makes me a real QRPer.
>You're not a real QRPer until you mess up as badly as I have.

Actually, to be a REAL QRPer, you must make a contact with the circuit as wired. (Distance is not a criteria, so if all else fails you may throw it at another ham to initiate the QSO.)

72,

Wayne, N6KR

Wayne Burdick
wayne@interval.com
(415) 354-0928

Interval Research Corp.
1801-C Page Mill Road
Palo Alto, CA 94304

From qrp-request@Think.COM Wed Apr 28 16:19:36 1993
Date: Wed, 28 Apr 93 13:19:32 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: Real QRPers

Jim Osburn writes:
{I soldered the transistors in the 40 M VFO I'm building in backwards.
{I claim that makes me a real QRPer.
{You're not a real QRPer until you mess up as badly as I have.

for 20? (I recently worked a fellow in KY with his new 20m MFJ and he convinced me to get a 20, but I can't remember why! Must not have made that great an impression on me....)

I'd think 30 is better because it's open - at least to SOMEwhere, almost all the time. 20 can be fun, but it sometimes closes for repairs or for inventory.

KE7QJ

From qrp-request@Think.COM Thu Apr 29 09:13:17 1993
Date: Thu, 29 Apr 93 09:10:54 EDT
From: Frank.Milos@East.Sun.COM (Frank Milos - Sun USOPS CSU Manufacturing Engineering)
Subject: RS12/13 Kep???

I saw in the latest issue of QQ that someone was using RS12/13 for QRP. RS12/13 has an uplink on 15M and a downlink on 10 M. I thought it might be fun to try to listen to the beacon until I could get a QRP xmtr together for 15M. When I uploaded a file with the latest Keps, RS 10/11 was the only one listed.

Does anyone know if this is the one you use or is there a different set of Keps required?

72,

Frank - N01E

From bruce@Think.COM Thu Apr 29 09:22:52 1993
From: Bruce Walker <bruce@Think.COM>
Date: Thu, 29 Apr 93 09:24:16 EDT
Subject: RS12/13 Kep???

I saw in the latest issue of QQ that someone was using RS12/13 for QRP. RS12/13 has an uplink on 15M and a downlink on 10 M. I thought it might be fun to try to listen to the beacon until I could get a QRP xmtr together for 15M. When I uploaded a file with the latest Keps, RS 10/11 was the only one listed.

Does anyone know if this is the one you use or is there a different set of Keps required?

72,

Frank - N01E

Depending on the source of the keps, you might see it listed as "Cosmos 2123", the host satellite.

--bruce WT1M

From bruce@Think.COM Thu Apr 29 09:51:45 1993
From: Bruce Walker <bruce@Think.COM>
Subject: RS12/13 Kep???

I saw in the latest issue of QQ that someone was using RS12/13 for QRP. RS12/13 has an uplink on 15M and a downlink on 10 M. I thought it might be fun to try to listen to the beacon until I could get a QRP xmtr together for 15M. When I uploaded a file with the latest Keps, RS 10/11 was the only one listed.

Does anyone know if this is the one you use or is there a different set of Keps required?

72,

Frank - N01E

Depending on the source of the keps, you might see it listed as "Cosmos 2123", the host satellite.

--bruce WT1M

----- End Included Message -----

From qrp-request@Think.COM Thu Apr 29 10:07:38 1993
Date: Thu, 29 Apr 1993 10:07:02 -0400 (EDT)
From: Robert Marlan <rsm@world.std.com>
Subject: Re: RS12/13 Kep???

On Thu, 29 Apr 1993, Frank Milos - Sun USOPS CSU Manufacturing Engineering wrote:

>

> I saw in the latest issue of QQ that someone was using RS12/13 for QRP.
> RS12/13 has an uplink on 15M and a downlink on 10 M. I thought it might be
> fun to try to listen to the beacon until I could get a QRP xmtr together for
> 15M. When I uploaded a file with the latest Keps, RS 10/11 was the only one

> listed.
>
> Does anyone know if this is the one you use or is there a different set of
> Keps required?
>
> 72,
>
> Frank - N01E

what is QQ. where do you obtain it?
bob KA6NOC

From qrp-request@Think.COM Thu Apr 29 10:25:16 1993
Date: Thu, 29 Apr 93 10:22:52 EDT
From: Frank.Milos@East.Sun.COM (Frank Milos - Sun USOPS CSU Manufacturing Engineering)
Subject: Re: RS12/13 Kep???

Thanks for the information, Bruce...

I ftp'ed the latest keps from archive.afit.as.mil and looked in the /pub/space directory. The latest keps are updated daily.

I checked the file of keps and have Cosmos 2123 listed.

Thanks for the quick reply.

72,

Frank - N01E

----- Begin Included Message -----

From qrp-request@Think.COM Thu Apr 29 10:32:53 1993
Date: Thu, 29 Apr 93 10:30:28 EDT
From: Frank.Milos@East.Sun.COM (Frank Milos - Sun USOPS CSU Manufacturing Engineering)
Subject: Re: RS12/13 Kep???

To reply to Bob's question, QQ stands for "QRP Quarterly" which is the

the quarterly publication of QRP ARCI. This is an excellent source of information for QRP enthusiasts which has a little bit of everything... product reviews, home projects, contest, awards, exchange of ideas. QRP ARCI is the international organization of QRP enthusiasts whose members are interested in all areas related to low power operation.

I have the membership information at home and can send it to you.

72,

Frank - N01E

----- Begin Included Message -----

From rsm@world.std.com Thu Apr 29 10:05:41 1993
From: Robert Marlan <rsm@world.std.com>
Subject: Re: RS12/13 Kep???
To: Frank Milos - Sun USOPS CSU Manufacturing Engineering <Frank.Milos@East>
Cc: qrp@Think.COM
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
Content-Length: 584
X-Lines: 23

On Thu, 29 Apr 1993, Frank Milos - Sun USOPS CSU Manufacturing Engineering wrote:

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> I saw in the latest issue of QQ that someone was using RS12/13 for QRP.
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> 15M. When I uploaded a file with the latest Keps, RS 10/11 was the only one
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> Does anyone know if this is the one you use or is there a different set of
> Keps required?
>
> 72,
>
> Frank - N01E

what is QQ. where do you obtain it?
bob KA6NOC

----- End Included Message -----

From qrp-request@Think.COM Mon Apr 26 20:21:36 1993
Date: Mon, 26 Apr 93 17:21:32 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Scout power reduction

Harry Bloomberg sent me the following mail that I am taking the liberty of publically posting because I think that it probably is of general interest to this group.

Paul

(And... thanks, Harry!)

----- Begin Included Message -----

I took a look at the Scout spec sheet when I got home. TenTec says there's an internal adjustment to reduce power. As to how low the power can be adjusted, TenTec does not say directly. However, current requirements are specified for 50 watts out and 5 watts, so I presume the power can be reduced to 5 watts.

Harry Bloomberg WA3TBL
hpb+@pitt.edu

----- End Included Message -----

From qrp-request@Think.COM Tue May 4 11:19:41 1993
Date: Tue, 4 May 1993 11:19:32 -0400
From: Thornwall <thorn@wam.umd.edu>
Subject: Sources for NiCad batteries?

Hi,
does anyone know of a good source for rechargeable batteries? I was looking for a 12v or 9v 2Ah NiCad battery to use for a QRP rig and a HT.
TNX
73s Greg KD3SU

From qrp-request@Think.COM Tue May 4 12:18:36 1993

From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Tue, 4 May 93 09:18:10 PDT
Subject: RE: Sources for NiCad batteries?

Myself and friends have just used either regular AA or C cells (lighter than gel cells for backpacking) either soldered together by the tags (10 x is 12V) or used the AA cell holders (x 8) from Radio Shack and similar outlets.

If you find a x10 AA or C cell holder let me know.

Regarding gel cells my two surplus 7AH cells are just too heavy to carry! I have my eye on a Quantum Ham battery as permanent solution. I have played with one and it looks like a good backpacking battery: not too heavy but with good capacity and charger/monitoring built in. Jeff, AC4HF, do you have one of these?

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com
"We conjure the spirits of the computer with our spells"

From: Thornwall <netmail!thorn@wam.umd.edu>
To: <qrp@Think.COM>
Subject: Sources for NiCad batteries?
Date: Tuesday, May 04, 1993 11:19AM

Hi,
does anyone know of a good source for rechargeable batteries? I was looking for a 12v or 9v 2Ah NiCad battery to use for a QRP rig and a HT.
TNX
73s Greg KD3SU

From qrp-request@Think.COM Tue May 4 12:45:36 1993
From: peacock@hermes1.sps.mot.com (Don Peacock)
Date: Tue, 4 May 93 09:38:47 MST
Subject: Re: Sources for NiCad batteries?

I am currently using Makita Batteries (the kind used in rechargeable drills etc.) They are around 10 V (although 12V is available) have a large capacity to weight (my gut feel) they are cheap and recharge in 1 hour. I started using them because I had a drill with these batteries and decided that since I had a charger and a battery I would play around with it. I have yet to use the HT enough on a weekend to drain one of these, however I don't talk much. I have also run mobile rigs @ 5W off one of the batteries, I am

currently looking for a SIMPLE circuit to take 2 of these batteries at approx 10V and regulate it down to 13.8.

The cost of these batteries is on the order of \$25 if I remember correctly, and you might even have one or two hady for experimenting with.

Don Peacock
N7PMN

```
-----  
|Don Peacock          | |          |  
|Motorola Inc.         | | " If UNIX was meant to be user |  
|Unix Software Engineer| | friendly, it would have been  |  
|(602)-898-5295        | | called Feelix "                |  
|2200 W. Broadway Rd  | |          |  
|Mesa Az              | | Email Don_Peacock@email.sps.mot.com |  
-----
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From qrp-request@Think.COM Tue May 4 13:48:58 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Tue, 4 May 93 10:44:43 PDT
Subject: Re: Sources for NiCad batteries?

Don:

One thing you should look at are the new simple high efficiency switching regulator chips from groups like Linear Technologies (and others). The great thing about them is that they have efficiencys of order 90% or better and cope with wide variation on the input voltage. Some will source up to 0.5A too!

These have almost arrived at the point of being as simple as an LM317 regulator. This is great for field use. So long as you can keep any RFI down from these devices it seems that they should have some good application in QRP.

The reason they've developed these devices is the burgeoning market for longer battery life in portable PCs powered by nicads.

Check out EDN and you local supplier. Can anyone who's been following the literature more closely provide device numbers?

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com
"We conjure the spirits of the computer with our spells"

From: Don Peacock <netmail!peacock@hermes1.sps.mot.com>
To: <qrp@Think.COM>
Subject: Re: Sources for NiCad batteries?
Date: Tuesday, May 04, 1993 9:38AM

I am currently using Makita Batteries (the kind used in rechargeable drills etc.) They are around 10 V (although 12V is available) have a large capacity to weight (my gut feel) they are cheap and recharge in 1 hour. I started using them because I had a drill with these batteries and decided that since I had a charger and a battery I would play around with it. I have yet to use the HT enough on a weekend to drain one of these, however I don't talk much. I have also run mobile rigs @ 5W off one of the batteries, I am currently looking for a SIMPLE circuit to take 2 of these batteries at approx 10V and regulate it down to 13.8.

The cost of these batteries is on the order of \$25 if I remember correctly, and you might even have one or two hady for experimenting with.

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N7PMN

```
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|2200 W. Broadway Rd  | |  
|Mesa Az              | | Email Don_Peacock@email.sps.mot.com |  
-----
```

From qrp-request@Think.COM Thu May 6 06:22:12 1993
Subject: Square wave harmonics
Date: Wed, 5 May 1993 22:10:55 -0500 (CDT)
From: John J. Welch <jjw@precipice.chi.il.us>

>
> Hmmm, nobody caught the obvious error(s) in my otherwise good post or
> perhaps you are all such nice guys that you thought you wouldn't mention it :-)
>
> A square wave (with 1:1 mark:space ratio) has only odd harmonics. This
> means the basic ideas presented are OK (and the basic conclusion is
> unchanged -- you need a LPF on the output) but the numbers are wrong.
>
> The amplitudes of the harmonics of a square wave goes as $1/n^2$ (did I
> get this wrong too?)

>
> The first spurious emission is the third harmonic which will be 1/9 of
> the fundamental in amplitude and 1/81 of the power of the fundamental
> (power goes as the voltage squared). This implies the spurious
> emissions are about -19dBc. The FCC wants -40dBc or better.
>
> Anyone got a spectrum analyzer and a square wave oscillator to check
> this revised figure?

I caught it, but was a nice guy :-) (too busy to reply :-))
Still think you're wrong - I believe *power* goes as $1/n^2$, as I can
barely see -20db distortion on a scope. I have an analyzer, and when
I looked at it I got approx -6ish for the 3rd. Will double-check on
Friday with the comm analyzer and a 20M oscillator.

Also, FCC regs want -30dbc if you're power out is <5 watts, if over 5
they want -40dbc *or* some small level, whichever is less.

-->jjw

ps if you're the one building a DDS rig, Analog Devices has been a real
bear to work with - AD9955 lead time is 22 weeks for samples, they won't
sell partial trays, the price for <100 pieces is *very* high, they don't
let *ordinary* people buy the eval kits and so forth. I've had much
better luck with Qualcomm...

From qrp-request@Think.COM Mon May 3 10:53:08 1993
From: jpo@acd4.acd.com (Jim Osburn)
Subject: Sunday
Date: Mon, 3 May 93 9:50:01 EST

>
> I'm not even going to mention the lack of activity up here
> Sunday.... :+>
>
> 72,
>
> Jim, KR1S
>
>

Hmmmm.

I tried a little on Sunday morning with my HW-8.
I tuned for about half an hour and I called CQ USE for about half an hour.
No luck.

Are we going to try again next Sunday?

Jim, WD9EYB

From qrp-request@Think.COM Mon May 3 12:04:23 1993
Date: Mon, 3 May 1993 09:03:51 PDT
From: David_H_Rogers.XKeys@xerox.com
Subject: Re: Sunday

To add to what Jim/WD9EYB mentioned:

I heard a lot of stations between 7030-7040 at 1200Z- 1400Z but couldn't tell who was part of the USE group. I didn't hear any CQ USE. Maybe in addition to calling CQ USE any time you give your call sign during a QSO put a /USE after it. Anyway I made 3-4 long ragchewing QRP QSO's with non USE stations and added a couple more states toward getting WAS/QRP award. Try to connect next Sunday I'll be around 7040.

Dave, WA2YXH/QRP
Evenings around 7040 or 14060

From qrp-request@Think.COM Mon May 3 11:46:11 1993
Date: 03 May 1993 10:45:48 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: Sunday QRP USE QSO fun

I tried on and off for 2 hours.. the bands weren't feeling very well.

I would really like to do this and get to meet some of the Usenet people on the air.

I hope we try it again (would really prefer an hour later.. 7:00 am is very early for Sunday.. only morning I get to sleep past 6:00.

73

Jeff, AC4HF

From qrp-request@Think.COM Sat Apr 24 18:43:39 1993
Date: Sat, 24 Apr 93 22:13:04 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Surplus QRP Gear (GRC-109)

Well, I got my GRC-109 rig on the air today. It's a pretty neat collection of boxes. Considering it works on 80-15 meters, including all points in between, it's not a bad deal at \$120, which includes a copy of the manual (they

don't give anything away at Fair Radio Sales). You need FT-243 crystals for the transmitter.

In case you're interested, here's some information I obtained today:

FREQ	POWER OUT (WATTS, MAX)
3560	10
7040	15
14060	15 (no 30-meter crystals)
21060	12 (no 17-meter crystals)

The open-circuit keying voltage is +60. The rig is cathode keyed; off-resonance keying current is 125 mA, 100 mA at resonance.

The weak link is the receiver. While sensitive, the tuning rate is quite fast and it has 9-kHz selectivity. An audio filter will help some, I'm sure, but that's still a lot of signals in the passband. I may splice a ceramic filter in there, 4-kHz bandwidth or so. The good news is, it has provision for crystal control also, so you could arrange an external VFO for the receiver (F + or - 455 kHz).

On the other hand, I was able to work W2F0 in New Jersey on the coax running up to the W1INF beam, on 40 meters, and hold the frequency for as long as I could send on the built-in straight key: about 20 minutes.

Antenna and headphone connections are via spring-loaded binding posts (jacks would be hard to waterproof I guess). I am using old electromagnet headphones (hi-Z); I rigged up an S0-239 on a piece of zip cord for the transmitter output. You can run full QSK, but, even though the key shorts the rcv antenna when transmitting (!), it's noisy. Hard to find your frequency, as the rcvr overloads. I had to back off the drive. They should have included a spotting switch.

There's NO AGC in the receiver. The BFO runs continuously. It's output is sampled and rectified to provide a gain-control voltage for the receiver! When you want to listen to R Habana (to see if your clandestine operation has been detected), you just turn the BFO control to the OFF area marked on the panel. That raises the BFO frequency above the range of hearing.

Okay, so it isn't an HW-9. You could probably throw these things out of a plane at 500 feet without a parachute and they'd survive.

You tune up the transmitter (Remember those days? You're probably eligible for QCWA) by peaking two neon bulbs and a #47 lamp arranged as an antenna ammeter! SWR? What's that. The book says it will match 72 to 1200 ohms. I noticed the loading cap is fully open when looking into 50 ohms. Especially on 80 meters, I got the feeling I could squeeze more power out if I could match the lower impedance.

Yes, it will drive random-length wires--it was designed to use a 75-100 inverted L. There may be a problem with harmonic suppression when you use a random wire. There may be a problem with harmonic suppression when you use a 50-ohm load. Am I going to put this thing on the spectrum analyzer? Hmmm. On 80 and 40, my operation will result in harmonics falling on the ham bands. On 30 and up.... I think I'll run it through a Johnson Matchbox--they take harmonics down pretty well.

There's a hand-cranked generator out there for this thing, but I'm not sure I want to use it on FD. It could be useful for aerobic exercise, though.

If you have any questions, feel free to send email to me. If you put one of these sets on the air, I'd like to work you. Just give me time to rig up my keyer!

72,

Jim, KR1S

--

jkearman@arrl.org

From qrp-request@Think.COM Mon Apr 26 16:31:12 1993
Date: Mon, 26 Apr 1993 14:28:00 -0600 (CST)
From: Peter Hardie <hardie@herald.usask.ca>
Subject: Try again: Jan 93 QQ

It seems that I didn't get my subscription renewal sent in time for me to get the Jan 93 QQ. Did that issue have the results of the 92 Fall QSO Party and if so where did I place?

73/72 de Pete hardie@herald.usask.ca VE5VA

From qrp-request@Think.COM Sun Apr 25 07:21:22 1993
Date: Sun, 25 Apr 93 13:21:08 +0200

From: nnsde01@mailserv.zdv.uni-tuebingen.de (Hans-Joachim Dezelski)
Subject: Two (questions) in a row

Is there anybody out there, who could give me some infos:

1. 2 years ago an OM was in Dayton and saw a kit which emulated a frequency analyzer when switched before a scope. He does not remember name of the company nor details. So if someone knows anything about it or has actually used it I would be glad to know.

2. Just read in the QRP Quarterly about a kit from Smith Electronics - (Fireball). I couldnt find the oscillator in DL and there were some remarks from the editor.

Is it still available and worth the price - and of course the trouble ordering it in USA :-).

72 de Hajo

DL1SDZ @ DB0AAA /Tuebingen

G-QRP 6087

AGCW 1984

QRP ARCI 8005

From qrp-request@Think.COM Sun Apr 25 18:32:46 1993
Date: Sun, 25 Apr 93 15:32:27 PDT
From: paulb@harley.tti.com (Paul Blumstein)
Subject: Re: Two (questions) in a row

>1. 2 years ago an OM was in Dayton and saw a kit which emulated a frequency
> analyzer when switched before a scope. He does not remember name of the
> company nor details. So if someone knows anything about it or has actually
> used it I would be glad to know.

I haven't used it, but A&A has a 450 MHz Spectrum Analyzer that uses a scope for display. it is \$460 as a kit or \$800 assembled. a 230v, 50 Hz power supply is avail for \$5. they warn that this is not a kit for the novice & you need a freq cntr & rf source to calibrate.

Write to the at:
A&A Engineering

2521 W. LaPalma, Unit #K
Anaheim, CA 92801

From qrp-request@Think.COM Mon May 3 16:33:04 1993
Date: 3 May 93 16:31:32 EDT
From: Daniel.W.Collison@Dartmouth.EDU (Daniel W. Collison)
Subject: unsubscribe

unsubscribe

Too much mail; maybe would be better as a usenet newsgroup. Thanks.

--dwc
Daniel.W.Collison@dartmouth.edu

From qrp-request@Think.COM Fri May 7 15:01:43 1993
Date: Fri, 7 May 93 12:18:06 +0200
From: nnsde01@mailserv.zdv.uni-tuebingen.de (Hans-Joachim Dezelski)
Subject: unsubscribe

unsubscribe

From qrp-request@Think.COM Mon May 3 17:47:02 1993
Date: Mon, 3 May 1993 17:44:33 -0400 (EDT)
From: Robert Marlan <rsm@world.std.com>
Subject: Re: unsubscribe

On 3 May 1993, Daniel W. Collison wrote:

> unsubscribe
>
> Too much mail; maybe would be better as a usenet newsgroup. Thanks.
>
> --dwc
> Daniel.W.Collison@dartmouth.edu

yes I agree how about changing to a newsgroup so people
can select topics of their interest!
bob KA6NOC .. struggling to get to 20WPM!!!

From qrp-request@Think.COM Mon May 3 18:34:18 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>

Date: Mon, 3 May 93 15:30:34 PDT
Subject: Re: unsubscribe

Making this list a newsgroup would be a disaster (witness all the other lists I've seen go to hell when opened up). The signal to noise ratio would drop like a rock.

The throughput of this group is miniscule compared to others. Skim reading and use of the delete command are recommended.

Finally if you wish to unsubscribe send mail to qrp-request and NOT THE LIST!!!!!!

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com
"We conjure the spirits of the computer with our spells"

From: Robert Marlan <netmail!rsm@world.std.com>
To: "Daniel W. Collison" <Daniel.W.Collison@Dartmouth.EDU>
Cc: <qrp@Think.COM>
Subject: Re: unsubscribe
Date: Monday, May 03, 1993 5:44PM

On 3 May 1993, Daniel W. Collison wrote:

> unsubscribe
>
> Too much mail; maybe would be better as a usenet newsgroup. Thanks.
>
> --dwc
> Daniel.W.Collison@dartmouth.edu

yes I agree how about changing to a newsgroup so people
can select topics of their interest!
bob KA6NOC .. struggling to get to 20WPM!!!

From qrp-request@Think.COM Tue May 4 10:46:25 1993
From: lapin@casbah.acns.nwu.edu (Gregory Lapin)
Subject: Re: unsubscribe
Date: Tue, 4 May 1993 09:45:41 -0500 (CDT)

> Making this list a newsgroup would be a disaster (witness all the other

> lists I've seen go to hell when opened up). The signal to noise ratio
> would drop like a rock.

>

I disagree - this group is acting like a moderated usenet group. Those
have very good SNR (eg. I get much more out of 5 minutes with
rec.radio.info (moderated) than I ever got out of 30 minutes with
rec.radio.amateur.misc (flamefest).

> The throughput of this group is miniscule compared to others. Skim
> reading and use of the delete command are recommended.
Newreaders offer much more control over reading articles (eg. they follow
threads, they allow jumping around inside the longer articles, they
automate much of the reply or followup process). My mail reader doesn't
have these features.

> Finally if you wish to unsubscribe send mail to qrp-request and NOT THE
> LIST!!!!!!

Good advice.

>

> Kevin Purcell N7WIM / G8UDP
> a-kevinp@microsoft.com

Greg Lapin KD9AZ
glapin@nwu.edu

From qrp-request@Think.COM Fri May 7 10:37:05 1993
From: mvjfm@mvubr.att.com
Date: Fri, 7 May 93 10:18 EDT
Subject: USE

Called CQ and listened on 30m for 30 minutes.
Finally went QRO with 50 w. and could neither
raise anyone or tell if anyone else was on.

Heard some ragchewers but couldnt tell who
they were.

Very noisy....

72 W1FMR

From qrp-request@Think.COM Fri May 7 12:11:55 1993
Date: Fri, 07 May 1993 09:11:43
From: hlester@as.arizona.edu (Howard Lester)
Subject: Re: USE

>Called CQ and listened on 30m for 30 minutes.

>Finally went QRO with 50 w. and could neither
>raise anyone or tell if anyone else was on.

>Heard some ragchewers but couldnt tell who
>they were.

>72 W1FMR

My experience was similar. I listened on 10.112 and heard no one; called CQ
USE a few times - nothing. Then I QRO'ed on 10.113 and worked a fellow in NY.
The band was not at all as noisy as it was the night before.

??

Howard KE7QJ

From qrp-request@Think.COM Tue May 4 16:13:23 1993
Date: 04 May 1993 15:12:48 -0500 (CDT)
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: USE.. QSO group

Hi gang,

Well just got Chuck Adam's note: I personally think he is
famous.. everytime I call to order a kit (from almost anyone
who sells them) they all know Chuck. I did finally find one
kit company that he hasn't built a kit from.. May be I can
beat him to it HI HI.

Well been listening to some of the comments. Maybe we can
figure out some logical times on certain freqs and certain
bands and call CQ USE at specific time periods. Think it
might be a neat INFORMAL net. I think 20-30-40 might be
good. I have had real good experience with all three on QRP.

Well, just a thought.

73 de Cookeville, TN

Jeff, AC4HF

From qrp-request@Think.COM Tue May 4 17:22:56 1993
Date: Tue, 04 May 1993 14:23:01
From: hlester@as.arizona.edu (Howard Lester)
Subject: Re: USE.. QSO group

I vote for 30m - it seems the most reliable and relatively free of QRM.

Howard

From qrp-request@Think.COM Wed May 5 08:57:04 1993
Date: Wed, 5 May 1993 7:56:44 -0500 (CDT)
From: James Speer <F_SPEERJR@CCSVAX.SFASU.EDU>
Subject: Re: USE.. QSO group

>I vote for 30m - it seems the most reliable and relatively free of QRM.
>
>Howard

I concur. Besides, it's the only band on which I COULD participate.

Jim K5YUT

From qrp-request@Think.COM Mon May 3 15:03:14 1993
Date: Mon, 03 May 93 17:10:33 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Usenet QRP QSO Party

Nobody seems to have worked anyone else from this group!
Two people have indicated interest in doing it again....

The LUF goes up fast now that we're into warmer weather.
The best times on 40 are a whole lot earlier than 1200Z,
at least on the East Coast. Let me have a look at the
propagation tables...but maybe the fall would be a better
time for a nationwide event. There's also the QRP ARCI first
Sundays, which start next month. Hope to meet some of you
then.

72,

Jim, KR1S

--

jkearman@arrl.org

From qrp-request@Think.COM Fri Apr 30 17:39:38 1993
From: Kevin Purcell (Rho) <a-kevinp@microsoft.com>
Date: Fri, 30 Apr 93 14:38:23 PDT
Subject: Re: VFO Phase Noise

Choosing the right core material:

One good point made by Mike Czuhajewski, WA8CMQ, in the current QQ (and I think Zack Lau KH6CP made this comment in QST tech correspondence too) is to use -7 (white) cores rather than -6 (yellow) cores.

The -7 has a temperature coefficient of 30 ppm compare to the -6 35ppm (not much but it is 20% less!). Avoid -2 (red) cores with a temperature coeff of 95ppm.

Most NP0 capacitor have a temp coeff of 0 plus/minus 30ppm so you still made need a little fiddling to get that ultimate stability!

He suggests using it as the VFO standard, especially as Amidon now stock -7 toroids in T37, T44, T50 and T68 sizes.

OHR are using these cores in their kits.

Kevin Purcell N7WIM / G8UDP

a-kevinp@microsoft.com

"We conjure the spirits of the computer with our spells"

From: Edward Pacyna <netmail!epacyna@auratek.com>

To: <QRP@Think.COM>; <danbl@arcturis.cna.tek.com>;

<uunet!arrrl.org!jkearman@uunet.UU.NET>

Cc: <ed@auratek.com>

Subject: Re: VFO Phase Noise

Date: Friday, April 30, 1993 3:37PM

The referenced VFO circuit has excellent (low) phase noise characteristics. This is mainly attributed to using a high Q tank circuit (high C, low L and L wound on a fairly large torid, T-68-6). The high Q is maintained because the coupling to the rest of the circuitry can be made very light (3pF typical) because its not critical for supplying feedback. Using 1Meg (vs 100K) for the gate bias resistor helps too. This Hartley circuit is one of the lowest noise oscillators you can build.

For example, when used with a DC receiver, you can actually hear a difference when using this circuit (weak signal reception and tonal quality)

Its also one of the most simple bullet proof VFO circuits to build and offers a lot of flexibility (e.g. easiest to temperature compensate, get a desired tuning range with on hand variable capacitor etc.).

73's

Ed W1AAZ

From qrp-request@Think.COM Fri May 7 08:37:04 1993
Date: Fri, 7 May 93 01:01:52 -0500
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: W5HKA, Luke B. Dodds

Gang,

probably many of you know or have heard of Luke. i just got a letter from him. he underwent open heart surgery April 12 - 24 and is now back home.

Luke is the treasurer for QRP ARCI and he is also the US rep for G-QRP club, he handles membership for the US of A folks etc.

those who know Luke may wanna drop him a card and wish him well. or, you can send me email and i'll see that he gets it. he is some 15 miles from me in Grapevine TX.

he and a bunch of others, including Mike Kilgore, secretary for QRP ARCI, and myself meet first saturdays of even months for lunch. we're going to have to change restaurants, since Luke had his surgery and I had an artherectomy (cleaning of the main artery like rotter rooter) last year. i cleaned up my act and lost 55 pounds. now at 211 pounds, but hey gang, i'm 6'6" in height. smallest of four boys. my younger brothers all hit 7'0". we grow big in texas..... ;-)

anyway, Luke is doing fine. say hi to him on the air or via snail mail.

for now, de k5fo dit dit

Chuck Adams, K5FO @ 70+ wpm cw
adams@sgi.com

From qrp-request@Think.COM Tue May 4 13:31:18 1993
Date: Tue, 4 May 93 13:23:05 EDT
From: "Henry T. Rand Jr." (FSAC-AAD) <rrand@PICA.ARMY.MIL>
Subject: W9GR Digital Sig. Proc.

I just received my W9GR Digital Signal Processor kit in the mail

yesterday. The kit is the 10 program model which sells for \$125 plus \$7 for shipping. It had been back ordered for 5 months. Unfortunately, I bought a DSP at Dayton so now I don't need the kit. My order cancellation request must have crossed paths with the shipment. Before I try to return it, I would like to offer the kit to anyone on the net who would be interested in it. Cost would be \$125 postpaid. The kit is complete and has never been opened. Send me an E-Mail(not to the net) at rrand@PICA.ARMY.MIL or call 201-586-2194 after 6PM EDT. The DSP unit I bought seems to do a nice job on reducing noise and carriers along with having some good CW filters.

Randy Rand
AA2U

From qrp-request@Think.COM Thu May 6 10:46:19 1993
Date: Thu, 6 May 1993 10:46:18 -0400 (EDT)
From: WEBSTER_KER@CSUSYS.CTSTATEU.EDU
Subject: W9GR DSP filter

I don't remember if it was here or on the contest list, but someone said that they had a W9GR DSP filter for sale. I deleted the message, but now have someone who might be interested. Whoever it was, could you please let me know who you are and if the filter is still available.
Thanks... Kevin N1EPU [WEBSTER_KER@CCSU.CTSTATEU.EDU]

From qrp-request@Think.COM Thu May 6 12:20:29 1993
Date: Thu, 6 May 93 12:12:33 EDT
From: "Henry T. Rand Jr." (FSAC-AAD) <rrand@PICA.ARMY.MIL>
Subject: W9GR DSP Kit sold

The W9GR DSP kit has been sold, thanks for all the interest in it. I really enjoy my DSP and am waiting for some real heavy line noises to return so I can give it a true test. They seem to have disappeared lately, maybe they know I got a DSP? Seriously though, it has done a nice job on the few intermittent noises that I have heard.

72,
Randy Rand AA2U
rrand@PICA.ARMY.MIL

From qrp-request@Think.COM Mon May 3 16:14:57 1993
From: hpb@hpb.cis.pitt.edu (Harry Bloomberg)
Subject: What is 72?
Date: Mon, 3 May 93 16:14:52 EDT

>
> 72,
>
> Jim, KR1S

I've been noticing that many of you are signing your email with the salutation "72". What is the meaning and origin of 72? Do folks running 10 KW commercial HF amps sign 74? :-)

42,
Harry Bloomberg WA3TBL
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p.s. If you want to understand the meaning of 42, I suggest you read "The Hitchhiker's Guide to the Galaxy" by Doug Adams.